GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run 9 December 14, 2004, 16:09:49; Search time 4 Seconds (without alignments)
4.004 Million cell updates/sec

Title: Perfect score: Sequence: US-10-679-532-78 3230 1 ATCCTAATCAAGACCCCAGT......AAAACTTCTCTCAAGGATCC 3230

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 112 seqs, 2479 residues

Total number of hits satisfying chosen parameters:

224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 88 summaries

Database : rnpbdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	1	0 5	DB B	ID US-09-993-346-214	N B
	_	1.5	40		-10-131-827-	Sequence 3711, Ap
	٠.	•	4 4		-10-218-654-13	135 An
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		•	42	_	-10-787-382-	ν
8	30	•	30	Н	-10-450-905-	5, Appl
	29	•	29	Ь	-09-789-529-	82, App
c 10	28	•	28	Н	-09-887-145-	24, App
	27	•	27	_	-10-450-905-	e 6, Appl
	5	•	27	_	-09-755-633-	Ü
	25.4	•	27	_	-10-218-654-13	: 136, Ap
	5	•	27	_	-10-262-439-1	e 136, Ap
	5	•	27	_	-10-787-382-	ښ ۲
16	25	٠	25	_	-09-887-14	23, App
17	24	•	24	_	-10-393-602-1	: 14, App
c 18	23	•	23	_	-10-632-534A-	10, App
	21	٠	21	_	-10-393-602	e 15, App
20	21	•	21	_	32-534A-	e 9, Appl
21	21	•	21	_	-10-632-534A-2	23,
	20	•	20	_	-09-758-881-1	152, Ap
	20	•	20	_	-09-800-629A-3	39,
c 24	20	0.6	20	_	-09-800-629A-4	, App
	20	•	20	-	-09-800-629A-4	41, App
	20		20	ш	-09-800-629A-4	42,
	20	٠	20	_	-09-800-629A-4	43,
	20		20	_	0-629A-4	44, App
	20		20	-	3-60-	45, App
	20		20	_	-09-800-629A-4	46,
	20		20	_	00-629A-4	e 47, App
	20		20		-00-000-6303-4	equence 48.
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-10-679-532 -10-679-532	-09-800-629A-09-80
	equence 50, equence 52, equence 53, equence 54, equence 55, equence 56, equence 57, equence 59, equence 60, equence 61, equence 62, equence 63, equence 64, equence 66, equence 66, equence 67, equence 67, equence 69, equence 69, equence 70, equence 71, equence 41, equence 41, equence 41, equence 42, equence 42, equence 43, equence 44, equence 44, equence 44, equence 45, equence 45, equence 46, equence 46, equence 47, equence 47, equence 47, equence 48, equence 49, equenc

ALIGNMENTS

RESULT 1

US-09-993-346-214

Sequence 214, Application US/09993346

Publication No. US20030124530A1

GENERAL INFORMATION:
Cantor, Charles R.
Andrews, Beth M.
Turin, Lisa M.
Fry, Kirk E.
Molecules, Compositions and Methods

Molecules, Compositions and Methods

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Sequence 2005, Application US/10131827
Publication No. US20040009479A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wohlgemuth, Jay
APPLICANT: Fry, Kirk
APPLICANT: Woodward, Robert
APPLICANT: Ly, Ngoc
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
TITLE OF INVENTION: CHRONIC INFLAMMATORY DISEASES
FILE REFERENCE: 506612000120
CURRENT APPLICATION NUMBER: US/10/131,827
CURRENT PILING DATE: 2002-09-06
PRIOR APPLICATION NUMBER: US/10/131,827
CURRENT FILING DATE: 2001-10-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/993,346
FILING DATE: 13-No. US20030124530A1-2001
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/354,947
FILING DATE: CUNknown>
APPLICATION NUMBER: US 08/171,389
FILING DATE: 20-DEC-1993
APPLICATION NUMBER: US 08/123,936
FILING DATE: 17-SEP-1993
APPLICATION NUMBER: US 08/123,936
FILING DATE: 23-DEC-1992
APPLICATION NUMBER: US 07/996,783
APPLICATION NUMBER: US 07/996,783
APPLICATION NUMBER: US 07/996,783
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ADDRESSEE: Genelabs Technologies, Inc.
STREET: 505 Penobscot Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Human interleukin 5 (IL-5) gene
SEQUENCE DESCRIPTION: SEQ ID NO: 214:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Brady, John F.
REGISTRATION NUMBER: 39,118
REFERENCE/DOCKET NUMBER: 4600-0175.20/G19P3D1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/723,618
FILING DATE: 27-JUN-1991
APPLICATION NUMBER: US 08/081,070
FILING DATE: 22-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 50 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.5%; Score 50; DB 1; ilarity 100.0%; Pred. No. 2.7; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94063
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CURRENT APPLICATION NUMBER: US/10/131,827
CURRENT FILING DATE: 2002-09-06
PRIOR APPLICATION NUMBER: US 10/006,290
PRIOR FILING DATE: 2001-10-22
PRIOR PPLICATION NUMBER: US 60/296,764
PRIOR PRILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 9090
SOPTWARE: PACENTIN VERSION 3.1
SEQ ID NO 3711
LENGTH: 50
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                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Yang, S
                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/09755633 Patent No. US20020127200A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3711, Application US/10131827 Publication No. US20040009479A1
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LENGTH: 50
                                                 APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/087,306
PRIOR APPLICATION NUMBER: 60/087,306
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Best Local Similarity
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APPLICANT: Woodward, Robert
APPLICANT: Ly, Ngoc
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
TITLE OF INVENTION: CHRONIC INFLAMMATORY DISEASES
FILE REFERENCE: 506612000120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Wohlgemuth, Jay
APPLICANT: Fry, Kirk
APPLICANT: Woodward, Rober
APPLICANT: Ly, Ngoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/296,764
PRIOR FILING DAYE: 2001-06-08
NUMBER OF SEQ ID NOS: 9090
SOFTWARE: Patentin version 3.1
PRIOR FILING DATE: 1
NUMBER OF SEQ ID NOS:
SOFTWARE: Patentin V
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                                        1998-05-29
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100.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-218-654-135
                                                                                                                                                                                             Sequence 135, Application US/10262439
Publication No. US20030143196A1
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial Sequence FEATURE:
PEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Primer
i-09-755-633-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 135, Application US/10218654 Publication No. US20030099609A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELLIE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF PILE REFERENCE: IM-2-C1
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/322,409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR PILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Mismatches
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Pred. No. 7.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 41.2;
Pred. No. 7
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APPLICANT: Yang, Shumin
APPLICANT: McCell, Catherine A.
APPLICANT: McCell, Catherine A.
APPLICANT: McCell, Catherine A.
APPLICANT: McCell, Caline And Feline Immunoregulatory Proteins, NUCLEIC
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-Cl-Cl
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/9/755,633
PRIOR FILING DATE: 1998-05-28
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR PILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
COCTUMENT: DESCRIPT US/201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 135
LENGTH: 42
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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US-10-787-382-2/c
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RESULT 8
US-10-450-905-5
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LENGTH: 42
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ/ID NOS: 174
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                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.1
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OTHER INFORMATION:
                                                                                                                                                                                                                                      OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                             FEATURE:
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                                                                                                                                                                    Local Similarity
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                                                                                                            2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
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No. US20040191868A1
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                                                                                                                                                                  1.3%;
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                                                                                                                                                                  Score 41.2; D
Pred. No. 7.5;
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Pred. No. 7
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Sequence 5, Application US/10450905
Publication No. US20040058360A1
GENERAL INFORMATION:
APPLICANT: NAKAZATO Hiroshi

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TITLE OF INVENTION: METHOD FOR CONCENTRATION OF GENE FILE REFERENCE: 2003-02.45/MMC/01736 CURRENT APPLICATION NUMBER: US/10/450,905 CURRENT FILLING DATE: 2003-06-19 PRIOR APPLICATION NUMBER: JP 2000-386025

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Sequence 82, Application US/09789529
Patent No. US20020132290A1
GENERAL INFORMATION:
APPLICANT: Frazer, Kelly A.
APPLICANT: Rubin, Edward M.
APPLICANT: Lootis, Gabriela G.
APPLICANT: Lootis, Gabriela G.
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Coordinate Cytokine Regulatory Sequences
FILE REFERENCE: 014939-001300US
CURRENT APPLICATION NUMBER: US/09/789,529
CURRENT APPLICATION NUMBER: US/09/789,529
CURRENT APPLICATION NUMBER: US/09789,529
PRIOR APPLICATION NUMBER: US/09789,529
PRIOR PRILING DATE: 2000-02-18
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US-10-450-905-5
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                                                                                                                                                                                                                                         Sequence 24, Application US/09887145
Publication No. US20030082139A1
GENERAL INFORMATION:
APPLICANT: Kim, Seung U
TITLE OF INVENTION: Immortali
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 82
LENGTH: 29
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NUMBER OF SEQ ID NOS: 10
SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.9%;
Best Local Similarity 100.0%;
Matches 30; Conservative
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nes 29; Conserv
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette,
COMPUTER: Dell PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1950 GTACTGTGGAAAGACTATTCAAAAAACTTG 1978
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                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker,
                                                                                                                                                                                                     NUMBER OF SEQUENCES: 54
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                                                                               STATE: Massachusetts COUNTRY: USA
                                                                                                                      CITY: Magnolia
                                                                                                                                             STREET: P.O.
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Conservative 0;
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                                                                                                                                         Box 5387
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                  3.50 inch, 1.40 Mb storage
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RESULT 12
US-09-755-633-3/c
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US-10-450-905-6
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Best Local Sim:
Matches 28;
Sequence 3, Application US/09755633

Patent No. US20020127200A1

GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
CURRENT APPLICATION NUMBER: US/09/755,633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 6, Application US/10450905
publication No. US20040058360A1
GENERAL INFORMATION:
APPLICANT: NAKAZATO Hiroshi
TITLE OF INVENTION: METHOD FOR CONCENTRATION OF GENE
FILE REFERENCE: 2003-0245/WMC/01736
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SEQ ID NO 6
LENGTH: 27
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Best Local S
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CURRENT FILING DATE: 2003-66-19
PRIOR APPLICATION NUMBER: JP 2000-386025
PRIOR FILING DATE: 2000-12-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial sequence FEATURE:
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INFORMATION FOR SEQ ID NO: 24:
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NAME: David Prashker, Esq.

REGISTRATION NUMBER: 29,693

REFERENCE/DOCKET NUMBER: UB

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                               1981 CTTAATAAAGAAATACATTGACGGCCA 2007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 24:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: MS DOS
SOFTWARE: Microsoft Word version 97
CURRENT APPLICATION DATA:
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STRANDEDNESS: single
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FILING DATE: 22-Jun-2001
CLASSIFICATION: Unknown
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100.0%; Pred. No.
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. 28;
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PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/887,306
PRIOR APPLICATION NUMBER: 50/887,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOPTWARE: Patentin Ver. 2.0
SEQ ID NO 136
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                                                                                                                                          US-10-262-439-136/c
                                                                                                                                                          RESULT 14
                                                                                                                                                                                                                                                                                                                                                      US-10-218-654-136
                                                                                       GENERAL INFORMATION:
                                                                                                         Sequence 136, Application US/10262439 Publication No. US20030143196A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 136, Application US/10218654 Publication No. US20030099609A1
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Best Local Similarity
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                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANIME AND FELINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT FILING DATE: 2001-01-
PRIOR APPLICATION NUMBER: 09/
PRIOR FILING DATE: 1999-05-28
                                                                      APPLICANT: Sim, Gek-Kee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 198-55-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin Ver. 2.1
                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Sim, Gek-Kee
                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
                                                                                                                                                                                                             *,27
                                                                                                                                                                                                                                              2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
CANT: Yang, Shumin
CANT: Dreitz, Matthew J.
CANT: Wonderling, Ramani S.
COF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
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                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001-01-05
                                                                                                                                                                                                                                                                                                 0.8%;
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                                                                                                                                                                                                                                                                               Score 25.4; D
Pred. No. 38;
4; Mismatches
                                                                                                                                                                                                                                                                                  4:
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Pred. No. 38;
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FILE OF INVENTED
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-05-29
INUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 136
CENGTH: 27
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
FEATURE: INFORMATION: Description of Artific
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US-10-787-382-3/c
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CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/09/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
                                                                      Matches
                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 3
                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                          OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
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                                                                    Local Similarity
mes 23; Conserv
2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
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                                                                      Conservative
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                                                                                  0.8%;
85.2%;
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                                                                    4.
                                                                                       Score 25.4;
Pred. No. 38
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Pred. No. 3
                                                                    Mismatches
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RESULT 16 US-09-887-145-23

Sequence 23, Application US/09887145 Publication No. US20030082139A1

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COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage

COMPUTER Dell PC

OPERATING SYSTEM: MS DOS

SOFTWARE: Microsoft Word version 97

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/887,145

FILING DATE: 22-Jun-2001

CLASSIFICATION: UNKnown

ATTORNEY/AGENT INFORMATION:

NAME: David Prashker, Esq.

REGISTRATION UNMBER: 29,693

REFERENCE/DOCKET NUMBER: 29,693

REFERENCE/DOCKET NUMBER: UBC-002

TELEPHONE: (978) 525-3794

INFORMATION FOR SEQ ID NO: 23:

SEQUENCE CHARACTERISTICS:
LENGTH: 25 base pairs

TYPE: nucleic acid
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US-10-393-602-14
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Publication No. US20030170714A1
GENERAL INFORMATION:
GENERAL STREAM ST
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APPLICANT: Kim, Seu
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.0%;
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/393,602
APPLICATION OMBER: US/10/393,602
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/592,126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 23:
                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
STREET: 350 Cambridge Avenue, Suite 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker, Esq.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
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                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 94306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: CA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Palo Alto
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; ORGANISM: Artificial Sequence ; FEATURE: TIFORMATION: Description of Artificial Sequence: Synthetic ; OTHER INFORMATION: Primer US-10-632-534A-10
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US-10-632-534A-10/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.7
Best Local Similarity 100.
Matches 24; Conservative
                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 10
LENGTH: 23
TYPE: DNA
                                                                               Matches
                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                 APPLICANT: MINKLER, MATTHEW M.
APPLICANT: MINKLER, MATTHEW M.
APPLICANT: MINKLER, MATTHEW M.
TITLE OF INVENTION: COMPETITIVE AMPLIFICATION OF FRACTIONATED TARGETS FROM
TITLE OF INVENTION: MULTIPLE NUCLEIC ACID SAMPLES
FILE REFERENCE: AMBI:065US
CURRENT APPLICATION NUMBER: US/10/632,534A
CURRENT FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: PCT/US02/03169
PRIOR PILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,692
PRIOR FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 24
NUMBER OF SEQ ID NOS: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (415) 324-0880
TELEPAX: (415) 324-0960
INFORMATION FOR SEG ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 24 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION: ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charlee K.
REGISTRATION NUMBER: 38,615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1883 CACCAACTGTGCACTGAAGAAATC 1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INDIVIDUAL ISOLATE: Primer SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGINAL SOURCE:
                                       2249 GGAGGAGAAGGACATTTTACTGC 2271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANTI-SENSE: NO
23 GGAGGAGAAGGACATTTTACTGC 1
                                                                                                 Similarity 100.0%;
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                                                                             Conservative
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                                                                                                 Score 23;
Pred. No.
                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4600-0111
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                                                                                                                    DB 1;
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                                                                                                                  Length 23;
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                                                                               Indels
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RESULT 19 US-10-393-602-15/c

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Sequence 15, Application US/10393602
Publication No. US20030170714A1
GENERAL INFORMATION:
APPLICANT: Gregory Dolganov

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                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-632-534A-9
                                                                                                                                                                                                                                                      Sequence 9, Application US/10632534A
Publication No. US20040058373A1
GENERAL INFORMATION:
APPLICANT: WINKLER, MATTHEW M.
APPLICANT: BROWN, DAVID
TITLE OF INVENTION: COMPETITIVE AMPLIFICATION OF FRACTIONATED TARGETS FROM
TITLE OF INVENTION: MULTIPLE NUCLEIC ACID SAMPLES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                    SEQ ID NO 9
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 21;
                                                                                                                                             FILE REFERENCE: AMBI:065US
CURRENT APPLICATION NUMBER: US/10/632,534A
CURRENT FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: PCT/US02/03169
PRIOR FILING DATE: 2002-01-31
PRIOR FILING DATE: 2002-01-31
                                                                               PRIOR APPLICATION NUMBER: 60/265,692
PRIOR FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 24
                                                             SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Primer IL4-2
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/592,126
FILING DATE: 26-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
TELEPAX: (415) 324-0960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
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ADDRESSEE: Dehlinger & Associates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA
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                                                             PatentIn Ver. 2.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/10/393,602 FILING DATE: 19-Mar-2003 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Palo Alto
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US-10-632-534A-23
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                                                                                                                                                                                                                            APPLICANT: Karras, James G
TITLE OF INVENTION: Antisense Oligonucleoti
TITLE OF INVENTION: Expression
FILE REFERENCE: ISPH-0532
CURRENT APPLICATION NUMBER: US/09/758,881
CURRENT FILING DATE: 2001-01-11
PRIOR APPLICATION NUMBER: PCT/US00/09054
PRIOR APPLICATION NUMBER: 09/288,461
PRIOR APPLICATION NUMBER: 09/288,461
PRIOR FILING DATE: 1999-04-08
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US-09-758-881-152/c
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Best Local Similarity 100.
Matches 21; Conservative
                                                                                                   SEQ ID NO 152
LENGTH; 20
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 152, Application US/09758881 Patent No. US20010029250A1
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                                                                                                                                                                       SOFTWARE:
                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense Oligonucleotide Modulation of STAT3
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. 52;
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Matches
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LENGTH: 20
                                  SOFTWARE: PatentIn Ver.
SEQ ID NO 40
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                       Sequence 40, Application US/09800629A Patent No. US20020128216A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. US20020128216A1 GENERAL INFORMATION:
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Best Local
                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                     CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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                                                                                                                                                                                                                                           APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                               APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: McKay, Robert
                                                                                                                                                                                                                           FILE REFERENCE: ISPH-0537
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
ORGANISM: Artificial Sequence
                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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Pred. No.
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APPLICANT: Dean, Nicholas M.

APPLICANT: Marras, James G.

APPLICANT: McKay, Robert

APPLICANT: McKay, Robert

ITITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL

ITITLE OF INVENTION: TRANSDUCTION

FILE REFERENCE: ISPN-0537

CURRENT APPLICATION NUMBER: US/09/800,629A

CURRENT FILING DATE: 2001-03-07

PRIOR APPLICATION NUMBER: PCT/US00/07318

PRIOR APPLICATION NUMBER: DS/280,799

PRIOR APPLICATION NUMBER: 09/280,799

PRIOR FILING DATE: 1999-03-26

NUMBER OF SEQ ID NOS: 210

NUMBER OF SEQ ID NOS: 210
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Best Local Similarity
Matches 20; Conserv
SOFTWARE: PatentIn Ver.
SEQ ID NO 42
LENGTH: 20
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Best Local Similarity
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
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McKay, Robert
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100.0%; Pred. No.
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100.0%; Pred. No
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CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION UNMBER: PART/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR PELICATION UNMBER: 09/280,799
PRIOR PILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SEQ ID NO 44
LENGTH: 20
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US-09-800-629A-42
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Best Local Similarity
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Best Local
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LENGTH: 20
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                                                                                                                                                                                            APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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APPLICANT: Karra
APPLICANT: MCKay
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NUMBER OF SEQ ID NOS: 210
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                                                                                                                                                                                  FILE REFERENCE: ISPH-0537
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Karras, James G
McKay, Robert
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APPLICANT: Manoharan, Muthiah
ITITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
ITITLE OF INVENTION: TRANSDUCTION
ITITLE OF INVENTION: TRANSDUCTION
ITITLE OF INVENTION: TRANSDUCTION
ITITLE OF INVENTION: TRANSDUCTION
ITITLE OF INVENTION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-26
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 210
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US-09-800-629A-46/c
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                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKAY, Robert
APPLICANT: Manoharan, Muthi
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SEQ ID NO 45
LENGTH: 20
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Best Local Similarity
Matches 20; Conser
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Best Local Similarity
Matches 20; Conserv
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SEQ ID NO 46
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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PEATURE:
OTHER INFORMATION: Description of Artificial Sequence:Synthetic
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; FEATURE: ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-800-629A-46
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US-09-800-629A-48/c
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 47
                                                                                                                                                                                                                                                                                Sequence 48, Application US/09800629A Patent No. US20020128216A1
GENERAL INFORMATION:
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Best Local (
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Best Local S
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APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
                                                  PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
                                                                                                          CURRENT APPLICATION NUMBER: US/09/800,629A CURRENT FILING DATE: 2001-03-07
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APPLICANT: Manoharan, Muthiah
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              PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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APPLICANT: Karras, James G
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McKay, Robert
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APPLICANT: Dear, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
ITITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
ITITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: DCT/US00,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-800-629A-48
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Matches 20;
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LENGTH: 20
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LENGTH: 20
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Best Local S
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
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CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
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ORGANISM: Artificial Sequence
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100.0%; Pred. No. 57
1ve 0; Mismatches
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Pred. No.
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US-09-800-629A-52/c
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Best Local Similarity
Matches 20; Conserv
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Best Local Similarity
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LENGTH: 20
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Patent No. US20020128216A1
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APPLICANT:
            APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR PILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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ORGANISM: Artificial Sequence
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APPLICATION NUMBER: 09/280,799
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McKay, Robert
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100.0%; Pred. No. 57;
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Query Match
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US-09-800-629A-53/c
; Sequence 53, Application US/09800629A
; Patent No. US20020128216A1
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SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 53
LENGTH: 20
TYPE: DNA
                                                                                                                                                       Sequence 54, Application US/09800629A
Patent No. US20020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
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SEQ ID NO 52
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0537 CURRENT APPLICATION NUMBER: US/09/800,629A CURRENT FILING DATE: 2001-03-07 PRIOR APPLICATION NUMBER: PCT/US00/07318 PRIOR APPLICATION NUMBER: 09/280,799
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CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
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PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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US-09-800-629A-56/c
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                                                                                                                               Sequence 56, Application US/09800629A
Patent No. US20020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
FILE REFERENCE: 15PH-0537
GIRERET ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PATENTIN VEY: 2.0
SEQ ID NO 54
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/800,629A CURRENT FILING DATE: 2001-03-07 PRIOR APPLICATION NUMBER: PCT/US00/07318 PRIOR FILING DATE: 2000-03-17
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APPLICANT: McKay, Robert
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                                                                                                                                                                                                                                                           RESULT 42
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 57
LENGTH: 20
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 56
LENGTH: 20
TYPE: DNA
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Best Local (
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Best Local
                                              APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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           CURRENT APPLICATION NUMBER: US/09/800,629A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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APPLICATION NUMBER:
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100.0%; Pred. No. 57;
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100.0%; Pred. No.
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57;
                                                                                        INTERLEUKIN-5
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; PRIOR FILING DATE: 2000-03-17; PRIOR APPLICATION NUMBER: 09/280,799; PRIOR PILING DATE: 1999-03-26; NUMBER OF SEQ ID NOS: 210; SOFTWARE: PatentIn Ver. 2.0; SEQ ID NO 58 LENGTH: 20; TYPE: DNA; ORGANISM: Artificial Sequence; CORGANISM: Artificial Sequence
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US-09-800-629A-60/c
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Best Local Similarity
Matches 20; Conser
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Best Local Similarity
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
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CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR PILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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McKay, Robert
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100.0%; Pred. No.
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PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR PPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTMARE: Patentin Ver. 2.0
SEQ ID NO 61
LENGTH: 20
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US-09-800-629A-61/c
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Best Local S
Matches 20
Sequence 62, Application US/09800629A
Patent NO. US/0020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
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SEQ ID NO 60
LENGTH: 20
TYPE: DNA
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Best Local Similarity
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APPLICANT: Karras, James
APPLICANT: McKay, Robert
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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: McKay, Robert
Manchara
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US-09-800-629A-63
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GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: KARYAS, James G
APPLICANT: MCRAY, Robert
APPLICANT: MCRAY, ROBERT
APPLICANT: MANOHARAN, MUTHIAH
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                        Sequence 64, Application US/09800629A Patent No. US20020128216A1
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Best Local :
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SEQ ID NO 63
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APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
APPLICANT: MCKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
FILE REFERENCE: ISPH-0537
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
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ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 200
SOPTWARE: PATENTIN Ver. 2.0
SEQ ID NO 64
LENGTH: 20
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US-09-800-629A-65/c
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                                                                                                                                             Sequence 66, Application US/09800629A
Patent No. US20020128216A1
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Best Local Similarity
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APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
                                        APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: McKay, Robert APPLICANT: Manoharan, Muthi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION
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ORGANISM: Artificial Sequence
FEATURE:
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TYPE: DNA
ORGANISM: Artificial Sequence
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                                      Manoharan, Muthiah
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100.0%; Pred. No. 57;
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Sequence 68, Application US/09800629A
Patent No. US20020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
APPLICANT: MOKAY, ROBERT
APPL
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 67
LENGTH: 20
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SEQ ID NO 66
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Best Local Similarity
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Patent No. US20020128216A1
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REPERENCE: ISPH-0537
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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McKay, Robert
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00.0%; Pred. No.
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Pred. No.
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RESULT 53
US-09-800-629A-69/c
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                                                                                                                                                                                                                                           US-09-800-629A-70/c
                                                                                                                                                                                                                                                                                 RESULT 54
                  Sequence 70, Application US/09800629A
PATENT NO. US20020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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LENGTH: 20
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Patent No. US20020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
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SEQ ID NO 68
LENGTH: 20
TYPE: DNA
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: 05/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Datanto United Section Section
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Best Local Similarity
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CURRENT', APPLICATION UMMBER: US/09/800,629A
CURRENT' FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:Synthetic
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nes 20; Conservative (
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Karras, James G
McKay, Robert
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APPLICANT:

Manoharan, Muthiah

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                                                                                                              US-10-679-532-39/c
                                                                                                                                    RESULT 56
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US-09-800-629A-71
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                                                      Sequence 39, Application US/10679532 Publication No. US20040121376A1 GENERAL INFORMATION:
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Best Local Similarity
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SEQ ID NO 71
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Best Local
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Patent No. US20020128216A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
TITLE OF INVENTION: ARVISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
                  APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
    APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
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Karras, James
McKay, Robert
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PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 199-03-26
PRIOR FILING DATE: 199-03-26
PRIOR FILING DATE: 200
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 40
ENGTH: 20
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US-10-679-532-40/c
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US-10-679-532-39
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Best Local Sim
Matches 20;
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Best Local :
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APPLICANT: Dean, Nicholas M.
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SEQ ID NO 39
LENGTH: 20
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Publication No. US20040121376A1
                                                                              Matches
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APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE ISPN-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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                            523 CCAAAGGCAAACGCAGAACG 542
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20 CCAAAGGCAAACGCAGAACG
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                                                                                                              Length 20;
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RESULT 58 US-10-679-532-41/c ; Sequence 41, Application US/10679532

Publication No. US20040121376A1

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PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: DOTO/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 41
LENGTH: 20
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-42
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR PPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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Best Local S
                                                                             Matches
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Publication No.
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Best Local Similarity
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CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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                                                                                                                                                                                                            ORGANISM: Artificial Sequence
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                        688 GCCAATGAGGTAATTTTCTT 707
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                                                                                               Similarity
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McKay, Robert
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No. US20040121376A1
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as, James G
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100.0%; Pred. No.
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Pred. No.
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US-10-679-532-43/c
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US-10-679-532-44/c
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                                                                    US-10-679-532-44
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SEQ ID NO 44
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APPLICANT: Dean, Nicholas
APPLICANT: Karras, James
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Best Local Similarity 100.0%;
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Query Match
Best Local Similarity
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PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/80,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G. APPLICANT: McKay, Robert
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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APPLICANT: McKay, Robert
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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ORGANISM: Artificial Sequence
FEATURE:
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                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Synthetic
                                                                                                                 FEATURE:
                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                   LENGTH: 20
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  Score 20;
Pred. No.
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    DB 1;
57; '
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                                                                    SEQ ID NO 46
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Best Local S
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
                                                                                                                                                                                                                                                                                               APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTIGENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dean, APPLICANT: Karra
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                  FILE REFERENCE:
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TYPE: DNA ORGANISM: Artificial Sequence
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                                                                                                         SEQ ID NOS: 210
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Karras, James G
McKay, Robert
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                                                                                                                                                                                                                      Sequence 48, Application US/10679532
Publication No. US20040121376A1
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Best Local S
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Best Local Similarity
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APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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APPLICANT: Karras, James G
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
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ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 20
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20; Conservative
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McKay, Robert
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100.0%; Pred. No. 57
1ve 0; Mismatches
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57;
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PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: PATENETIN Ver. 2.0
SEQ ID NO 49
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US-10-679-532-49/c
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                                                                                                                                                            Sequence 50, Application US/10679532
Publication No. US20040121376A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
APPLICANT: Manoharan, Muthiah
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Best Local Similarity
Matches 20; Conser
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Best Local Similarity
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            APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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PRIOR APPLICATION NUMBER: PCT/US00/07318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
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100.0%; Pred. No. 57
tive 0; Mismatches
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57;
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RESULT 69
US-10-679-532-52/c
J Sequence 52, Application US/10679532
Publication No. US20040121376A1
GENERAL INFORMATION:
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    OTHER INFORMATION: Description of Artificial Sequence:Synthetic
    US-10-679-532-51
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US-10-679-532-51/c
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SEQ ID NO 50
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
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Best Local Similarity
Matches 20; Conserv
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SEQ ID NO 51
LENGTH: 20
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APPLICANT: Dean, Nicholas
APPLICANT: Karras, James
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Best Local Similarity 100.
Matches 20; Conservative
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FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/9/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR PRIOR DATE: 2001-03-07
PRIOR APPLICATION NUMBER: US/9/800/07318
PRIOR PILING DATE: 2000-03-17
PRIOR PILING DATE: 2000-03-17
PRIOR PILING DATE: 1999-03-26
NUMBER: OF SEQ ID NOS: 210
NUMBER: OF SEQ ID NOS: 210
APPLICANT: KATTAB, JAMES G
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muchiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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PRIOR APPLICATION NUMBER: 09/-
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                      APPLICANT: Dean, Nicholas APPLICANT: Karras, James
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: McKay, Robert
Manoharra
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L00.0%; Pred. No. 57;
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Pred. No.
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57;
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RESULT 71
US-10-679-532-54/c
US-10-679-532-54/c
; Sequence 54, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION
; GENERAL INFORMATION
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
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US-10-679-532-53/c
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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US-10-679-532-52
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SEQ ID NO 53
LENGTH: 20
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Best Local Similarity
Matches 20; Conserv
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Best Local Similarity
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APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
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PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 09/280,799
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CURRENT FILING DATE: 2003-10-06
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                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
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Pred. No.
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57;
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PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEG ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 55
LENGTH: 20
TYPE: DNA
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US-10-679-532-55/c
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR PRIOR PRIOR NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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SEQ ID NO 54
LENGTH: 20
                                                                                             Query Match
Best Local Similarity
                                                                            Matches
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: 189H-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE: OTHER INFORMATION: Description of Artificial Sequence:Synthetic
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OTHER INFORMATION: Description of Artificial Sequence:Synthetic
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100.0%; Pred. No:
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100.0%; Pred. No.
                                                                          0; Mismatches
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RESULT 73 US-10-679-532-56/c

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SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 57
LENGTH: 20
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SEQ ID NO 56
LENGTH: 20
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                                                                                      Query Match
Best Local Similarity
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PRIOR TILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
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CURRENT APPLICATION NUMBER: US/10/679,532

CURRENT FILING DATE: 2003-10-06

CURRENT FILING DATE: 2003-10-06
                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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PRIOR FILING DATE: 1999-03-26
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                      OTHER INFORMATION: Description of Artificial Sequence:Synthetic 10-679-532-57
                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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                                                                                                                                                                                              TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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2108 TTTTTCACAGAAAAAGTGTG 2127
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McKay, Robert
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100.0%; Pred. No.
                                                              0; Mismatches
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TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2001-03-17
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2001-03-17
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 1999-03-26
NUMBER: OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 59
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
COLUMN TARRESTOR OF SEQUENCE OF
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APPLICANT: MCKAY, ROBERT
APPLICANT: MARTAS, JAMES G
APPLICANT: MANDARAN, MUTHIAH
APPLICANT: MANDARAN, MUTHIAH
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2001-03-17
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: DFT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-10-679-532-59
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Marches 20; Conserv?
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US-10-679-532-58
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
APPLICANT: Mancharan, Muthiah
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SEQ ID NO 58
LENGTH: 20
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Publication No. US20040121376A1
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APPLICANT: Dean, Nicholas
APPLICANT: Karras, James
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Query Match

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US-10-679-532-60
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
                                                                                                   CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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Best Local
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                                                                                                                                                                                                                                                                                                  APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G
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ORGANISM: Artificial Sequence
                                            ENGTH: 20
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McKay, Robert
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vo. US20040121376A1
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-61
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US-10-679-532-63/c
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-62
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SOFTWARE: Pac
SEQ ID NO 62
FENGTH: 20
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
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Best Local Similarity
Matches 20; Conserv
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Best Local Similarity
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PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                         APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ARTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
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APPLICANT: McKay, Robert
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No. US20040121376A1
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Pred. No.
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US-10-679-532-63
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                                                                                                                                                                                                                                                                                                       RESULT 82
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Best Local Similarity
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Publication No. US20040121376A1
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Best Local Similarity
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                                                                        APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
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CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF
TITLE OF INVENTION: TRANSDUCTION
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              CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
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PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
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PRIOR FILING DATE: 2000-03-17
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PRIOR FILING DATE: 2001-03-07
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100.0%; Pred. No. 57;
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; Sequence 67, Application US/10679532; Publication No. US20040121376A1; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G; APPLICANT: MCKAy, Robert; APPLICANT: MGKAy, Robert; APPLICANT: Mancharan, Muthiah; TITLE OF INVENTION: ANTISENSE MODULATION OF; TITLE OF INVENTION: TRANSDUCTION
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US-10-679-532-67/c
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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LENGTH: 20
TYPE: DNA
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SEQ ID NO 66
LENGTH: 20
TYPE: DNA
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Karras, James APPLICANT: McKay, Robert
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100.0%; Pred. No.
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                         OF INTERLEUKIN-5 SIGNAL
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RESULT 86
US-10-679-532-69/c
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             Sequence 69, Application US/10679532
Publication No. US20040121376A1
GENERAL INFORMATION:
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Best Local (
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SEQ ID NO 68
LENGTH: 20
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Best Local Similarity
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APPLICANT: Karra
APPLICANT: McKay
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
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PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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CURRENT FILING DATE: 2003-10-06
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PRIOR FILING DATE: 1999-03-26
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ublication No. US20040121376A1
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ORGANISM: Artificial Sequence
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Karras, James G
McKay, Robert
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Nicholas M.
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100.0%; Pred. No.
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 70
LENGTH: 20
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GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 69
LENGTH: 20
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Best Local Similarity
Matches 20; Conserv
                                                                                      Matches
                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR APPLICATION NUMBER: US/09/800,7318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
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APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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                            2002 CGGCCAAAAAGTAAGTTACA 2021
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Conservative
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100.0%; Pred. No. 57
lve 0; Mismatches
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                                                                                      Mismatches
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Page 25

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Sequence 71. Application US/10679532
Publication No. US20040121376A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Marcharan, Muchiah
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT APPLICATION NUMBER: US/09/800,629A
PRIOR APPLICATION NUMBER: US/09/800,7318
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: US/09/800,7318
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1009: 210
SOFTWARE: PatentIn Ver. 2.0
SOFTWARE: PatentIn Ver. 2.0
ORGANISM: Artificial Sequence
PRIOR INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-71
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Query Match 0.6%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 57; Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps

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Search completed: December 14, 2004, 16:09:53 Job time : 4 secs

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Minimum
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Maximum Match 100%
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Perfect score:
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  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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                                                                                                                                                                                                                                                                                                                    length:
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                                                                                                                                                                                                                                                                                                                                                   101 seqs, 2471 residues
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  GenCore version
(c) 1993 - 2004
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5.321 Million cell update
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US-08-171-389-214
US-08-175-228A-214
US-08-475-228A-214
US-08-482-080A-214
US-09-354-947-214
US-09-354-947-214
US-08-466-852-2
US-08-466-852-2
US-08-466-852-1
US-08-466-852-1
US-08-434-503-48
US-08-434-503-51
US-08-434-503-51
US-08-434-503-51
US-08-434-503-51
US-08-434-503-51
US-08-434-503-51
US-08-434-503-51
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US-09-225-2018-56
US-09-225-2018-56
US-09-225-928-56
US-09-371-415-24
US-09-434-503-41
US-09-431-527-136
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US-09-887-145-23
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US-08-897-086-14
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US-08-434-503-44
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US-08-621-841-11
US-09-280-799-41
US-09-280-799-42
US-09-280-799-43
US-09-280-799-45
US-09-280-799-45
US-09-280-799-46
US-09-280-799-59
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US-09-280-799-59
US-09-280-799-59
US-09-280-799-59
US-09-280-799-69
US-09-280-799-79
US-09-280-799-69
US-09-280-799-69
US-09-280-799-79
US-09-
                    IS-09-322-409-134

IS-09-451-527-134

IS-09-451-5006

IS-09-422-978-5006

IS-09-198-452A-5765

IS-08-434-503-53

IS-08-434-503-53

IS-09-331-347C-5
                                                          -09-198-452A-5483
-09-079-839-1
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Sequence

13, Appl
44, Appl
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111, Appl
115, Appl
115, Appl
116, Appl
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ALIGNMENTS

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US-08-171-389-214
                                                                                                                                     ; INDIVIDUAL ISOLATE: Human interleukin 5 (IL-5) gene US-08-171-389-214
                                                                 Query Match
Best Local Similarity
Matches 50; Conserv
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                           TELEPHONE: (415) 324-0880
TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 214
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                          MOLECULE TYPE: DN
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 46:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 08/081,070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Re-lease #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/996,783
FILING DATE: 23-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/723,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 08/123,936
FILING DATE: 17-SEP-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Fry, Kirk E.
TITLE OF INVENTION: Sequence-Directed DNA Binding
TITLE OF INVENTION: Molecules, Compositions and Methods
NUMBER OF SEQUENCES: 641
                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 22-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Redwood City
STATE: CA
                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: double
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                               ENGTH:
                               459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
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505 Penobscot Drive
                                                                   Conservative
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Andrews, Beth M.
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                                                                                  Score 50; DB 1; Pred. No. 2.8;
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                                                                   Mismatches
                                                                                                    Length 50;
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RESULT 2 US-08-123-936-214

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US-08-475-228A-214
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                                                                                                                                                                 Sequence 214, Application US/08475228A Patent No. 5869241
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Patent No. 5726014
                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                         GENERAL INFORMATION:
APPLICANT: Edwards, Cynthia A
APPLICANT: Cantor, Charles R.
APPLICANT: Andrews, Beth M.
                                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/
FILING DATE: 23-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 27-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Fablan, Gary R.
REGISTRATION NUMBER: 33.87
APPLICANT: Turin, Lisa M. APPLICANT: Fry, Kirk E. TITLE OF INVENTION: Sequence TITLE OF INVENTION: Molecul NUMBER OF SEQUENCES: 664
                                                                                                                                                                                                                                                                                                                                                                                                                                            HYPOTHETICAL: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Human interleukin 5 (IL-5) gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/996,783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/123,936
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
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ADDRESSEE: Genelabs Technologies, Inc
STREET: 505 Penobscot Drive
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                         Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                      459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
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                                                                                       Andrews, Beth M.
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Turin, Lisa M.
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 Sequence-Directed DNA Binding Molecules, Compositions and Methods 664
                                                                                                                               Cynthia A
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                                                                                                                                                                                                                                         Sequence 214, Application US/08482080A Patent No. 6010849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                        GENERAL INFORMATION:
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FILING DATE: 27-UTW-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 22-UTW-1993
ATTORNEY/AGENT INFORMATION:
NAME: Stratford, Carol A.
REGISTRATION NUMBER: 34,44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 50 base pairs
                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/475,228A
FILING DATE: 06-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/123,936
FILING DATE: 17-SEP-1993
                                                      APPLICANT: Turin, Lisa M.
APPLICANT: Fry, Kirk E.
TITLE OF INVENTION: Sequence-Directed DNA Binding
TITLE OF INVENTION: Molecules, Compositions and Methods
NUMBER OF SEQUENCES: 664
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: DN
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 23-DEC-1992 PRIOR APPLICATION DATA:
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ADDRESSEE: Genelabs Technologies, Inc.
STREET: 505 Penobscot Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
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CITY: Redwood City
STATE: CA
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                   STREET:
                                    ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                       459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGGACGCAGTCTTGTACT 508
                                                                                                                                                                                                                                                                                                                                                                                                                             50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
DEDNESS: double
SSEE: Genelabs Technologies, Inc
1: 505 Penobscot Drive
   Redwood City
                                                                                                                                                                                                                                                                                                                                                      CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50
                                                                                                                                             Edwards, Cynthia A.
Cantor, Charles R.
Andrews, Beth M.
Turin, Lisa M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                 Sequence 214, Application US/09354947
                                                                                                                                                                                                                                                                                                 Patent No. 6384208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PILING DATE: 17-SEP-1993

PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/996,783

PILING DATE: 23-DEC-1992

PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION UNMBER: US 07/723,618

FILING DATE: 27-JUN-1991

PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/081,070

FILING DATE: 22-JUN-1993

ATTORNEY/AGENT INFORMATION:

NAME: BESSÉM: JOHN E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/482,080A
FILING DATE: 07.JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/171,389
FILING DATE: 20-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/123,936
APPLICATION NUMBER: US 08/123,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (650) 324-0960 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                               GENERAL INFORMATION
                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Brady, John F.
REGISTRATION NUMBER: 39,118
REFERENCE/DOCKET NUMBER: 46/
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: DN
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy
                                                                                       ADDRESSEE: Genelabs
                                                                                                                                          APPLICANT: Fry, Kirk E.
TITLE OF INVENTION: Sequence-Directed DNA Binding
TITLE OF INVENTION: Molecules, Compositions and M
                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                     STATE:
                                                        CITY:
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                     COUNTRY:
                                                                          STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                        459 CATTICCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
TRY: USA
94063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             50;
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                                                    Redwood City
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                                                                        E: Genelabs Technologies, 505 Penobscot Drive
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                                                                                                                                                                                                                         Andrews,
                                                                                                                                                                                                                           Cantor, Charles R. Andrews, Beth M.
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                                                                                                                                                                                                       Lisa M.
                                                                                                                                                                                                                                                                Cynthia A.
                                                                                                                                 664
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                                                                                                                                                Compositions and Methods
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Best Local S
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TELEFAX: (650) 324-0960
INFORMATION FOR SEQ ID NO: 214
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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HYPOTHETICAL: NO
ORIGINAL SOURCE:
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APPLICATION NUMBER: US 08/123,936
FILING DATE: 17-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/996,783
FILING DATE: 23-DEC-1992
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PILING DATE:
PRIOR APPLICATION DATA:
PRIOR TCATION NUMBER: US 08/482,080
^^-JUN-1995
^^/171,389
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APPLICATION NUMBER: US 07/723,618
FILING DATE: 27-JUN-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                   TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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MEDIUM TYPE: Floppy
COMPUTER: IBM PC COM
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REGISTRATION NUMBER: 39,118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/171,389 FILING DATE: 20-DEC-1993
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                   COUNTRY: USA
ZIP: 94063
                                                                                                                                                         CITY: Redwood City
                                                                                                                                                                                                 ADDRESSEE:
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STRANDEDNESS: double
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                                                                                                                                                                                           Genelabs Technologies, Inc.
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                                                                                                                                                                                                                                                     Sequence-Directed DNA Binding Molecules, Compositions and Methods
                                                                                                                                                                                                                                     641
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US-08-466-852-2/c
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Best Local (
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                  ZIP: 07065-0907

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 in, 1.4kb
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Human interleukin 5 (IL-5) gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 50 base pairs
TYPE: nucleic acid
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APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1992
                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Panzer, Curtis C.
REGISTRATION NUMBER: 33,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 4600-0175.41/G19PCT2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
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APPLICATION NUMBER: US 08/123,936
FILING DATE: 17-SEP-1993
                                                TELEPHONE: (908)594-3199
                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                             STREET: TANKAY
                                                                                                                                                     APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 424
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                                                                                  REFERENCE/DOCKET NUMBER: 19151IA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Fabian, Gary R. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: double
                                   TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
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o. 5681936
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                                                                                                                                                                                                                                                                                                                                           New
                                                                                                                                                                                                                                                                                                                                                                             126 East Lincoln Avenue
                                   (908) 594-4720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                           Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.5%; Score 50;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 A SINGLE STEP PURIFICATION OF RECOMBINANT HUMAN INTERLEUKIN-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 07/996,783
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                                                            US-09-322-409-135/c
; Sequence 135, Application US/09322409
; Patent No. 6471957
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US-08-466-852-3
                                                                                                        RESULT 9
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                                                                                                                                                                                                                                                                        US-08-466-852-3
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence 3, Application US/08466852
Patent No. 5681936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                            Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (908)594-4720 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Panzer, Curtis C.
REGISTRATION NUMBER: 33,752
REFERENCE/DOCKET NUMBER: 19
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                      TOPOLOGY: 15
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Merck & Co.
                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 424
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nes 46; Conserv
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TOPOLOGY: lir
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                                                                                                                                                                                                                                                                                      DNA (genomic)
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                                                                                                                                                                                                                            Score 43; Pred. No.
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Pred. No. 4.
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                                                                                                                                                                                                                                        Length 43;
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GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Wang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PRO
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-05-28
EARLIER FILING DATE: 1999-05-28
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                                                                                                                                              US-09-451-527-135
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                                                                                                                                                                                            SEQ ID NO 135
LENGTH: 42
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                   Query Match
Best Local Similarity
Matches 40; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 1.3%;
Best Local Similarity 95.2%;
Matches 40; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 135
LENGTH: 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 135, Application US/09451527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
                                                                                                                                                                                                                                                                                       EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND ELLINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLES.OF.; JUVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
                                                                                                                                                             OTHER INFORMATION: OTHER INFORMATION:
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OTHER INFORMATION:
OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
                                2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
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                                                                     Conservative
                                                                                                                                                               Description of Artificial Sequence: Primer
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                                                                                      1.3%;
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Pred. No. 7.6;
2; Mismatches
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                                                                                      Score 41.2;
Pred. No. 7
                                                                         Mismatches
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                                                                                                                                                                                   Synthetic
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RESULT 11 US-08-434-503-48

Sequence 48, Application US/08434503 Patent No. 5616490

GENERAL INFORMATION:
APPLICANT: Sean M
APPLICANT: Kennet

Sean M. Sullivan Kenneth G. Draper

TITLE OF INVENTION: TITLE OF INVENTION:

METHOD AND REAGENT FOR TREATMENT OF INFLAMMATORY DISEASE

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                                                                                                                                                                                                                                                                                                                                                      Sequence 4, Application US/08466852
Patent No. 5681936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                               atent No. 5681936
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
PILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
PILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELEPHONE: (213) 489-1600
TELEPHONE: (213) 489-1600
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                               ZIP: 07065-0907
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.:
COMPUTER: Apple Macintosh
OPERATING SYSTEM: SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA
APPLICATION NUMBER: US/08/434,503
                 OPERATING SYSTEM: System 7.0.1
SOPTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                       TITLE OF INVENTION: A TITLE OF INVENTION: RE NUMBER OF SEQUENCES: 4 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
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                                                                                                                                                                STATE: New Jersey
                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                               COUNTRY:
                                                                                                                                                                                   CITY: Rahway
                                                                                                                                                                                                                        ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2136 AGACGGAGAGTAAAACCAATTCCTAGACTACCTGC 2169
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acid
DEDNESS: single
                                                                                                                                                                                                     E: Merck & Co., Inc.
126 East Lincoln Avenue
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611 West Sixth Street
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US/08/466,852
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                                                                                         3.5 in, 1.4kb
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                                                                                                               INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
TENGTH: 39 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/08466852 Patent No. 5681936
  Matches
             Query Match
Best Local
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Best Local Similarity
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                                                                                                                                                                                                             APPLICATION NUMBER: US/08/
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Panzer, Curtis C.
REGISTRATION NUMBER: 33,75
REFERENCE/DOCKET NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                     ZIP: 07065-0907
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 in, 1.4kb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Panzer, Curtis C.
REGISTRATION NUMBER: 33,752
REFERENCE/DOCKET NUMBER: 19:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
                                                                     TOPOLOGY: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 4
                                                                               TYPE: STRANDEDNESS: 81.
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TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (908)594-3199
TELEFAX: (908)594-4720
PRMATION FOR SEQ ID NO: 4
                                                                                                            TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                   TELEPHONE:
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                Similarity
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126 East Lincoln Avenue
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  Conservative
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                                                                     DNA (genomic)
                                                                                                single
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             1.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A SINGLE STEP PURIFICATION OF RECOMBINANT HUMAN INTERLEUKIN-5
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 Score 33.4; Di
Pred. No. 19;
0; Mismatches
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Pred. No. 17;
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                           DB 1;
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                          Length 39;
  Indels
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  0;
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  Gaps
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CTATGAGGATGCTTCTGCATTTGAGTTTTGCTAGCT 39

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RESULT 15.
US-08-721-260-10/c
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US-08-434-503-51
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: SECONDATION: DECEMBER 1, 1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                     Sequence 10, Application US/08721260 Patent No. 5968755
                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. 5616490 GENERAL INFORMATION:
                                                                                                                                                 GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Sean H. APPLICANT: Kenneth G. Draper
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
THE OF INVENTION: DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM Compatible

COMPUTER: TBM MC-DOS (Version 5.0)
APPLICANT: Roederer, Mario
APPLICANT: Rabin, Ronald
APPLICANT: Herzenberg, Leonore A.
APPLICANT: Herzenberg, Leonard A.
TITLE OF INVENTION: Methods for Determining T-cell Profiles
TITLE OF INVENTION: of Immunocompromised Subjects
NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
TYPE: n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Warburg, Richard C
REGISTRATION NUMBER: 32,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
STREET: 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                               Application US/08434503
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611 West Sixth Street
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                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                       1.0%; Score 33; DB 1; 75.8%; Pred. No. 17;
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32,327
3ER: 200/276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51:
                                                                                                                                                                                                                                                                                                                                                                                     8; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                           Length 33;
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US-08-434-503-53
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COMPUTER: INM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/721,260
PILING DATE: 26-SEP-1996
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 60/004,364
PILING DATE: 27-SEP-1995
AFTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 8600-0161.30
TELECOMMUNICATION INFORMATION:
TELESPHONE: (415) 324-0860
TELEFAX: (415) 324-0860
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 53, Application US/08434503 Patent No. 5616490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AN
TITLE OF INVENTION: TREATMENT
TITLE OF INVENTION: DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPULOGE: DNP
MOLECULE TYPE: DNP
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (415) 324-09.
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
ZIP: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                       ADDRESSEE: Lyon & Ly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.0%; hes 33; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 350 came
CITY: Palo Alto
                                                                                                                                                                              CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                                       ZIP: 90017
                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 33 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Dehlinger & Associates
STREET: 350 Cambridge Avenue, Sui
                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.0%; Score 33; DB 1; Length 33; D0.0%; Pred. No. 17;
US/08/434,503
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-434-503-53
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                                                                                       TELEFAX: (703) 836-0106
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 29 nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: ITTLE OF INVENTION: PTITLE OF INVENTION: DOUBLES OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
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FILLING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 3.
COMPUTER: IBM Clone, 8088 Turbo
OPERATING SYSTEM: MS DOS 5.0
SOFTWARE: Word Perfect, Version 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Richard A. Steinberg
REGISTRATION NUMBER: 26,588
REFERENCE/DOCKET NUMBER: BOG-139/CIP II
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 549-2282
MOLECULE TYPE: CDNA HYPOTHETICAL: no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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TELEX: 67-3510
                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: PCT/US94/10957 FILING DATE: CLASSIFICATION:
                                     STRANDEDNESS:
TOPOLOGY: lir
                                                                       TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: U
ZIP: 22314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Alexandria
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Virginia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goldstein, Harris; Kollmann, Tobias R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                       linear
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                                                       single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 08/008,895
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                                                                                                                                                                                                                                                                                                                                                                                                                       5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15;
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                                                                                                                          US-08-859-998-56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 29; Conserv
                                                             Matches
                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                               TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 28 base pairs
                                                                                                                                                                                                                                                                            ATTORNEY/ÄGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION UNMBER: 37,620
REFERENCE/DOCKET NUMBER: 0909
TELEPHONE: 415-325-570
TELEPHONE: 415-325-570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY:
                                                                                                                                    FEATURE:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 21-MAY-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
COMPUTER: IBM Compat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Chenchik, Alex APPLICANT: Jokhadze, Georg APPLICANT: Bibilashvilli,
                                                                                                                                                                    MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 2200 Sand
CITY: Menlo Park
                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
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                             1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
                                                             28;
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28 GGGAATAGGCACACTGGAGAGTCAAACT 1
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2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SD
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                                                             Conservative
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                                                                                                                                                                                      linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Diskette
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                                                                             100.0%;
                                                                                                                                       oligonucleotide primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1375
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                                                                           0.9%; Score 28; DB 1;
100.0%; Pred. No. 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 29;
100.0%; Pred. No.
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                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                            09096/002001
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                                                           0;
                                                                                          Length 28;
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RESULT 19 US-09-225-928-56/c

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION UNMEER: US/09/225,928

APPLICATION NUMEER: US/09/225,928

FILING DATE: 05-Jan-1999

CLASSIFICATION: CURROWN>
PRIOR APPLICATION ONTA:
APPLICATION ONTA:
APPLICATION NUMBER: 08/859,998

FILING DATE: 21-MAY-1997

ATTORNEY/AGENT INFORMATION:
NAWE: Field, Bret E.
REGISTRATION NUMBER: 37,620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: oligonucleotide primer SEQUENCE DESCRIPTION: SEQ ID NO: 56:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bibilashvilli, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Chenchik, Alex
                                                                                                                                                                                     APPLICANT: Chenchik, Alex
Jokhadze, George
Bibilashvilli, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: DNA FEATURE:
                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish &
                                                                                                                                               TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                         28 GGGAATAGGCACACTGGAGAGTCAAACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 28 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM Compatible OPERATING SYSTEM: Windows95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: US
ZIP: 94025
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Menlo Park
                                                              STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                      STATE: CA
                                        CITY: Menlo Park
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OF SEQUENCES: 1375
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jokhadze, George
Bibilashvilli, R
                                                          2E: Fish & Richardson, P.C.
2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
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US-09-371-615A-5
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                                                                                                                                                       ; OTHER INFORMATION: PCR primer US-09-371-615A-5
                                                                                                                                                                                                                            TITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
TITLE OF INVENTION: CANINE INTERLEUKIN 5
FILE REFERENCE: 03604001700US00
CURRENT APPLICATION NUMBER: US/09/371,615A
CURRENT FILING DATE: 1999-08-10
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 5
LENGTH: 28
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 5, Application US/09371615A PATENT NO. 6537781
GENERAL INFORMATION:
APPLICANT: IDEXX LABORATORIES
                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                             Matches
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INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                ORGANISM: Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.0%;
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COMPUTER READABLE FORM:
COMPUTER: DIBKette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: PastSEQ for Windows
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/225,201B
FILING DATE: 05-Jan-1999
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: oligonucleotide primer SEQUENCE DESCRIPTION: SEQ ID NO: 56:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: DNA
                              440 CTGATTGTTAGAAATTATTCATTTCCTC 467
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28;
                                                                             28;
  1 CTGATTGTTAGAAATTATTCATTTCCTC 28
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TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/859,998 FILING DATE: 21-MAY-1997
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                                                                             Conservative
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                                                                                             0.9%; Score 28; DB 1; 100.0%; Pred. No. 28;
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                                                                             0; Mismatches
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                                                                                                                Length 28
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RESULT 22 US-09-887-145-24/c

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Best Local Similarity
                                                                                                                                                                                                           TITLE OF INVENTION: METHOD AND RETITLE OF INVENTION: TREATMENT OF TITLE OF INVENTION: DISEASE NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon & Lyon STREET: 611 West Sixth Street
                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
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    COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
                                                                                                                                                                       CITY: Los Angeles
STATE: California
                                                                                                                                    COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: David Prashker, Esq.
REGISTRATION NUMBER: 29,693
REFERENCE/DOCKET NUMBER: UBC-002
TELECOM/UNICATION INFORMATION:
TELEPHONE: (978) 525-3794
RMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Microsoft Word version 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/887,145
FILING DATE: 22-Jun-2001
CLASSIFICATION: Unknown
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1975 CTTGTCCTTAATAAAGAAATACATTGAC 2002
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MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage
COMPUTER: Dell PC
OPPERATING SYSTEM: MS DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker, Esq.
STREET: P.O. Box 5387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28;
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STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 01930
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 28 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/08434503
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                                                                                                                                                      USA
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                                                                                                                                                                                                                                                                                           METHOD AND REAGENT FOR TREATMENT OF INFLAMMATORY DISEASE
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US/08/434,503
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US-08-859-998-55
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Jokhadze, George
APPLICANT: Bibilashvilli, Rob
TITLE OF INVENTION: METHOD OF
TITLE OF INVENTION: EXPRESSIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 55, Appl:
Patent No. 5994070
                                                        FILING DATE:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 0909
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
            TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 04-MAY-19
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMERR: US
FILING DATE: 19-JAN-19
APPLICATION NUMBER: 07
                                                                                                                                                                                        FILING DATE: 21-MAY-CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: December 7, 1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 2200 Sand
CITY: Menlo Park
                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: UZIP: 94025
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REFERENCE/DOCKET NUMBER: 200/276
                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                     COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: CA
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TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,3
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ENGTH:
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Similarity 59.3%; Pred. No. 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08859998
                                                                                                                                                                                                                                                                                                                                                                                                                                                            E: Fish & Richardson, P.C.
2200 Sand Hill Road, Suite 100
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                                                                                                                                                                                                                                                                                                                                   IBM Compatible
                                                                                                                                                                                                                                                                                                                                                      Diskette
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                                                                                                                                                                                                                                          21-MAY-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EXPRESSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11; Mismatches
                                                                                                      09096/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
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                                                                                                                                 OTHER INFORMATION: oligonucleotide primer; SEQUENCE DESCRIPTION: SEQ ID NO: 55: US-09-225-928-55
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US-09-225-928-55
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Patent No. 6355829
GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                    Matches
                                                                                     Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                  TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 55:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single
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MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95

SOFTWARE: FastSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08/859,998
FILING DATE: 21-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 09096/002001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
                                                                                                                                                                                                            MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           543 TTTCAGAGCCATGAGGATGCTTCTGC 568
                                 543 TTTCAGAGCCATGAGGATGCTTCTGC 568
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                                                                                       Similarity
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TTTCAGAGCCATGAGGATGCTTCTGC 26
                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/225,928 FILING DATE: 05-Jan-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: CA
                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Menlo Park
                                                                                                                                                                                                                                                                                  LENGTH: 26 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09225928
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                                                                0.8%; Score 26; DB 1; llarity 100.0%; Pred. No. 34; Conservative 0; Mismatches
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Bibilashvilli, Robert
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US-09-225-2018-55

US-09-225-2018-55

; Sequence 55, Application

; Patent No. 6489455

; GENERAL INFORMATION:
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US-09-322-409-136/c
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                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                 Sequence 136, Application US/09322409 Patent No. 6471957
                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 415-322-5070
TELEPAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 55:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/225,201B
FILING DATE: 05-Jan-1999
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US/08/859,998
FILING DATE: 21-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 099
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastUSEO for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: oligonucleotide primer SEQUENCE DESCRIPTION: SEQ ID NO: 55:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: METHOD OF EXPRESSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Chenchik, Alex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                   26;
                                                                                                                                                                                                                                                                                                                                                   1 TTTCAGAGCCATGAGGATGCTTCTGC 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 26 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 94025
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Bibilashvilli,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 26; DB 1; 100.0%; Pred. No. 34;
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US-09-451-527-136/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CAUINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOPTWARE: PATENTING DATE: 2.0
SEQ ID NO 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 136
LENGTH: 27
                                                                                                            Sequence 23, Applicatic
Patent No. 6780641
GENERAL INFORMATION:
APPLICANT: Kim,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 23; Conserv
                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
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                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                        2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker, Esq.
STREET: P.O. Box 5387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
                                                         NUMBER OF SEQUENCES:
                                                                                     TITLE OF INVENTION: Immortalized human microglia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                  Application US/09887145
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                                                                                                                                                                                                                                                                                                                              Conservative
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Pred. No. 3
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Pred. No. 38
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                                                                                                                                                                                                                                                                                                                                                 38;
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; Betweent No. 582102.
; Patent No. 582102.
; GENERAL INFORMATION:
APPLICANT: Gregory Dolganov
; TITLE OF INVENTION: Transcripts Encoding
; TITLE OF INVENTION: Polypeptides
; NUMBER OF SEQUENCES: 151
; CORRESPONDENCE ADDRESS:
ANDRESSEE: Dehlinger & Associates
ANDRESSEE: Dehlinger & Associates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EQUENCE DESCRIPTION: SEQ ID NO: US-09-887-145-23
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US-08-592-126-14
; Sequence 14, Application US/08592126
                                 APPLICATION NUMBER: US/08/592,
FILING DATE:
CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
TELEPAX: (415) 324-0860
INFORMATION FOR SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
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Best Local Similarity
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TELEPHONE: (978) 525-3794
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb
COMPUTER: Dell PC
OPERATING SYSTEM: MS DOS
SOFTWARE: Microsoft Word version 97
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/09/887,145
FILING DATE: 22-Jun-2001
CLASSIFICATION: Unknown
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 350 Cam
CITY: Palo Alto
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: peptid
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TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: David Prashker, Esq.
REGISTRATION NUMBER: 29,693
REFERENCE/DOCKET NUMBER: UBC-002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 01930
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 Cambridge Avenue, Suite 250
                                                                                                                                                                                                                                                                                                                                                                                                                           USA
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                                                                                                                                                                                                                                                             US/08/592,126
                                                                                                                                 4600-0111
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Best Local Similarity
                                                           Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/592,126
FILING DATE: 26-JAN-1996
FILING DATE: 10-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-0111.30
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: DNP MOLECULE TYPE: DNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: DNI
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                              TELEFAX: (415) 324-096
[NFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                       ORIGINAL SOURCE:
INDIVIDUAL ISOLATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNMBER: U$/08/687,080
FILING DATE: 17-JUL-1996
                                                                                                                                                                      HYPOTHETICAL:
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Gregory Dolganov TITLE OF INVENTION: Human R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: 8114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                               TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                              TELEPHONE: (415) 324-0880
TELEFAX: (415) 324-0960
                                                                                                                                                                                                                             STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
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                1883 CACCAACTGTGCACTGAAGAAATC 1906
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5965427
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ilarity 100.0%;
Conservative
                                                             Conservative
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                                                         0.7%; Score 24; DB 1; Length 24; 100.0%; Pred. No. 41; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  175
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                                                                                                                                       Primer IL5-1
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RESULT 33
US-08-434-503-47
; Sequence 47, Application US/08434503
; Patent No. 5616490
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US-09-168-595-14
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Best Local Similarity
Matches 24; Conserv
                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Sean M
APPLICANT: Kennet
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ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
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APPLICANT: Gregor
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                                                                                                                                                                                                                                                                                                                                                                                                                                         HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Primer IL5-1
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                             APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATC
TITLE OF INVENTION: DISEASE
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/168,595
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/592,126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA RE-LEASE #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Gregory TITLE OF INVENTION: TITLE OF INVENTION:
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STREET: 350 Cambridge Avenue, Suite 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single TOPOLOGY: linear
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                  STREET:
                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                  1883 CACCAACTGTGCACTGAAGAAATC 1906
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Los Angeles
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                  E: Lyon & Lyon
611 West Sixth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                        Sean M. Sullivan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Floppy disk
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                                                                                   TREATMENT OF INFLAMMATORY DISEASE
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                                                                                                                                                                                                                                                                                                                                                                 0.7%; Score 24; DB
100.0%; Pred. No. 41
ive 0; Mismatches
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COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

90017

California

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APPLICANT: EAGLES, Peter Anthony Minter
APPLICANT: ZHENG, Richard Qihao
FITLE OF INVENTION: INHIBITION OF CYTOKINE PRODUCTION
FILE REFERENCE: N & V 604-557 BTG 137 766
CURRENT APPLICATION NUMBER: US/99/617,548
CURRENT FILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: GB 9801391.5
PRIOR FILING DATE: 1998-01-22
PRIOR APPLICATION NUMBER: GB 9824794.3
PRIOR APPLICATION NUMBER: GB 9824794.3
PRIOR APPLICATION NUMBER: DS 9824794.3
PRIOR APPLICATION NUMBER: PCT/GB99/00179
PRIOR APPLICATION NUMBER: PCT/GB99/00179
PRIOR FILING DATE: 1998-01-20
NUMBER: DF SEO TD NOS. 15
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                                                                US-09-617-548-13
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                                                                                                                                                                                                                  SEQ ID NO 13
LENGTH: 27
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Best Local
Query Match
Best Local Similarity
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 300/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                              SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
                                                                                OTHER INFORMATION: Description of Artificial Sequence: Oligomer OTHER INFORMATION: containing palindromic sequence from human IL-5 OTHER INFORMATION: promoter
                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/434,503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single TOPOLOGY: linear
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0.7%;
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Pred. No. 45;
Score 22.4;
Pred. No. 53;
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                    DB 1;
                    Length 27
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                                                                                          Sequence 44, Application US/08434503 Patent No. 5616490
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Patent No. 5616490
                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
GENERAL INFORMATION:
APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08, FILING DATE: 04-MAY-1995 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 08, FILING DATE: 19-JAN-1993 APPLICATION NUMBER: 07/98: FILING DATE: December 7, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Sean M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: Wordberfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
TITLE OF INVENTION: DISEASE
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
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STREET: 6:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Compatible OPERATING SYSTEM: IBM MS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: California
                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Los Angeles
                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH:
                                                                                                                                                                                                                                             541 CGTTTCAGAGCCATGAGGATGC 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31 CGACCCTGCCAAGGCTTGGCATTT
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611 West Sixth Street
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (213) 955-0440
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                                                                                                                                                                                                                                                                                                                                                                                            single
                                                                                                                                                                                                                                                                                                   0.7%; Score 22; DB 1; 77.3%; Pred. No. 49;
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                                                                                                                                                                                                                                                                                5; Mismatches
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US-08-721-260-9
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                                                                                                                                                                                                                                                                                              Patent No. 5968755
GENERAL INFORMATION:
APPLICANT: Roedere
APPLICANT: Rabin,
APPLICANT: Herzenb
APPLICANT: Herzenb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION UNMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/ACENT INFORMATION:
NAME: Marbing Bid 1992
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
         COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                            APPLICANT: Herzenberg, Leonore A.
APPLICANT: Herzenberg, Leonard A.
APPLICANT: Herzenberg, Leonard A.
TITLE OF INVENTION: Methods for Determining T-cell Profiles
TITLE OF INVENTION: of Immunocompromised Subjects
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSER. DATASSES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600 TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
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CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,3 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
TOPOLOGY: li
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                                                                                                                          COUNTRY:
                                                                                                                                                               CITY: Palo Alto
                                                                                                              ZIP: 94306
                                                                                                                                                                                    STREET:
                                                                                                                                                                                                    ADDRESSEE:
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DEDNESS: single
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611 West Sixth Street
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350 Cambridge Avenue, Suite 250
                                                                                                                              USA
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ER: 200/276
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Pred. No.
                 Version #1.25
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US-08-592-126-15/c
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Best Local Similarity 100.0%;
Matches 22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15, Application US/08592126
Patent No. 5821091
GENERAL INFORMATION:
                                               TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
                                                                                                                     CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 27-SEP-19
                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
COMPUTER: IBM FC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Gregory Dolganov
TITLE OF INVENTION: Transcri
TITLE OF INVENTION: Polypept
NUMBER OF SEQUENCES: 151
CORRESPONDENCE ADDRESS:
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HYPOTHETICAL: NO
ANTI-SENSE: NO
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REFERENCE/DOCKET NUMBER: 86
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 94306
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TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
             TYPE: nucleic acid
STRANDEDNESS: single
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350 Cambridge Avenue, Suite 250
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linear
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%; Pred. No. 49;
0; Mismatches
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                                                                                                                                                                                                                                                   FILING DATE: 26-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-0111.30
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0860
TELEPAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
                                                                 Query Match
Best Local Similarity
                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No.
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Best Local S
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HYPOTHETICAL: NO
ANTI-SENSE: NO
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                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Rel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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ADDRESSEE: Dehlinger & Associates
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                           LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: U. ZIP: 94306
                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/01 FILING DATE: 17-JUL-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Palo Alto
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                    2181 GGTGTAATGAACACCGAGTGG 2201
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o. 5965427
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21
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100.0%; Pr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Release #1.0, Version #1.25
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                                                                                                                            Primer IL4-2
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                                                                  Score 21; DB 1; Length 21; Pred. No. 53;
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                                                     Mismatches
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                                                     Indels
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RESULT 40

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US-09-168-595-15/c
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US-08-621-841-11
                                                                                                                                                                                                                                    Sequence 15, Application US/09168595
Patent No. 6555666
GENERAL INFORMATION:
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Patent No. 6096869
                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 950
FILING DATE: 22-MAR-1995
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                    APPLICANT: Gregory Dolganov
TITLE OF INVENTION: Transcr
TITLE OF INVENTION: Polypep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC COMPAtible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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CITY: San Francisco
STATE: California
"""ited Stat
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 781-1989
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                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                          TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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REGISTRATION NUMBER: 2
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                                                    COUNTRY: U
                                                                                      STATE:
                                                                                                       CITY:
                                                                                                                     STREET:
                                                                                                                                       ADDRESSEE:
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                                                                                                                       350 Cambridge Avenue,
                                                                      USA
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Scarpini, Cinzia (
                                                                                                                                       Dehlinger & Associates
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PCT-US94-10957-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                               FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: Richard A. Steinberg
REGISTRATION NUMBER: 26,588
REFERENCE/DOCKET NUMBER: BOG-
TELECOMMUNICATION INFORMATION:
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (415) 324-0960
NFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM Clone, 8088 Turbo
OPERATING SYSTEM: MS DOS 5.0
SOFTWARE: Word Perfect, Version 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/10957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Primer IL4-2
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HYPOTHETICAL: 1
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 46(
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                          STREET: 413 N. Washington Street CITY: Alexandria
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                                                TELEPHONE:
                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
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                                 (703) 836-0106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Goldstein, Harris; Kollmann, Tobias R.
VENTION: Immunodeficient Mouse Models of
VENTION: Pathogenesis of Human Disease and Efficacy and Toxicity of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SYSTEM: PC-DOS/MS-DOS
PatentIn Release #1.0, Version #1.25
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                                                (703)
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                                                  549-2282
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                                                                                       BOG-139/CIP II
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; Pred. No.
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53;
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Best Local Similarity
Thehes 20; Conserve
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US-09-280-799-39/c
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US-09-280-799-40/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 39
LENGTH: 20
                                                                  SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 40
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 39, Application US/09280799
Patent No. 6136603
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKAY, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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                                                                                                                 TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0340 CURRENT EPLICATION NUMBER: US/09/280,799 CURRENT FILING DATE: 1999-03-26 NUMBER OF SEQ ID NOS: 208
                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                              Patent No. 613660
                                                                                                                                                                                                                                                                                                            Sequence 40, Application US/09280799
                                                                                                                                                                                                                         APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                          APPLICANT: Dean, Nicholas M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: ISPH-0340
                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Description of Artificial Sequence: Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:Synthetic
                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE
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                                                                                                                                                                                                                                                                                                                                                                                                                                     509 ATGCACTTTCTTTGCCAAAG 528
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.6%; Score 20; DB 1; 100.0%; Pred. No. 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.7%; Score 21; 00.0%; Pred. No.
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PATENT NO. 6136603

GENERAL INFORMATION:
APPLICANT: LOEAN, NICHOLAS M.
APPLICANT: MCKAY, JAMES G
APPLICANT: MCKAY, ROBERT
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
1 SEQ ID NO 42
1 LENGTH: 20
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US-09-280-799-41/c
                                                                                                                                 ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-42
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                                                               Query Match
Best Local S
Matches 20
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APPLICANT: Karras, James G
APPLICANT: Karras, James G
APPLICANT: MCKAY, ROBERT
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: 1SPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 41
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Matches
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ORGANISM: Artificial Sequence
                                                                                                                                                                 ORGANISM: Artificial Sequence FEATURE:
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nes 20; Conserv
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                     688 GCCAATGAGGTAATTTTCTT 707
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Similarity 100.0%;
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 GCCAATGAGGTAATTTTCTT 1
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                                                                             100.0%;
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; Pred. No. 57;
0; Mismatches
                                                             Score 20; DB; Pred. No. 57; 0; Mismatches
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Pred. No.
                                                                                DB 1;
. 57;
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57;
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 43
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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US-09-280-799-43/c
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APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 44
LENGTH: 20
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Patent No. 6136603
GENERAL INFORMATION:
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Patent No. 6136603
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Best Local Similarity
                                                                      Matches 20;
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Best Local S
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Dean, Nicholas N
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                TYPE: DNA
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                                 895 TCCTCTCCAGACTCTGAGGA 914
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Similarity 100.0%; Pred. No.
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100.0%; Pred. No.
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US-09-280-799-45/c ; Sequence 45, Application US/09280799 ; Patent No. 6136603

GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G

RESULT 49

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CURRENT APPLICATION UNMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 46
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: MEARY, Nicholas M.
APPLICANT: MERRY, NOBERT
TITLE OF INVENTION: ANTISENSE MODULATION OF IN
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
UMMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 47
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US-09-280-799-46/c
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US-09-280-799-45
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US-09-280-799-46
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SEQ ID NO 45
LENGTH: 20
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Patent No. 6136603
GENERAL INFORMATION:
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Best Local Similarity
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Best Local Similarity
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100.0%; Pred. No. 57;
ative 0; Mismatches
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Sequence 48, Application US/09280799

Patent No. 6136603

GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: MCKAY, James G
APPLICANT: MCKAY, ROBERT
ITILE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
ITILE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
ITILE OF INVENTION INDRESS: US/09/280,799

CURRENT APPLICATION NUMBER: US/09/280,799

CURRENT FILLING DATE: 1999-03-26

NUMBER OF SEQ ID NOS: 208

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 48

LENGTH: 20

TYPE: DNA
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US-09-280-799-48/c
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Best Local Similarity
Watches 20; Conserva
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US-09-280-799-49/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-280-799-48
                                                    ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-49
                                                                                                                                                       FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 49
                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKAY, Robert
                                                                                                                                                                                                                                                                                                                                                                          Sequence 49, Application US/09280799 Patent No. 6136603
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Best Local Similarity
                Query Match
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TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
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                                                                                                                                            LENGTH: 20
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100.0%; Pred. No.
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100.0%; Pred. No.
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Score 20;
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Best Local Similarity

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RESULT 56
US-09-280-799-52/c
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US-09-280-799-51
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US-09-280-799-50
                                                                                                                                Query Match
Best Local S
Matches 20
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PACENTIN Ver. 2.0
SEQ ID NO 50
LENGTH: 20
                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 51
LENGTH: 20
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: WCKAY, Robert
TITLE OF INVENTION: TANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TANSDUCTION
FILE REFERENCE: ISPH-0340
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APPLICANT: MCKAY, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Dean, Nicholas M.
                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
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100.0%; Pred. No. 57;
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karrae, James G
APPLICANT: Kerrae, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: TRANSDUCTION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 53
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
COUNTED TATEORATION: DOZIGITATION OF INTERLEUKIN-5
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Sequence 53, Application US/09280799
Patent No. 6136603
GENERAL INFORMATION:
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Sequence 54, Application US/09280799
Patent No. 6136603
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
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GENERAL INFORMATION:

APPLICANT: Dean, Nicholas M.

APPLICANT: Karras, James G

APPLICANT: Kerras, James G

APPLICANT: MCKAY, ROBERT

TITLE OF INVENTION: ATTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL

TITLE OF INVENTION: TRANSDUCTION

FILE REFERENCE: ISPH-0340

CURRENT APPLICATION NUMBER: US/09/280,799

CURRENT FILING DATE: 1999-03-26

RUMBER OF SEQ ID NOS: 208
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SEQ ID NO 52
LENGTH: 20
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Best Local Similarity
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ORGANISM: Artificial Sequence
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US-09-280-799-54
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Best Local Similarity
Matches 20; Conser
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SEQ ID NO 55
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Patent No. 6136603
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                                 SEQ ID NO 56
LENGTH: 20
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
TITLE OF INVENTION: TRANSDUCTION
TILE REFERENCE: ISPH-0340
CURRENT APPLICATION UNMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
                                                                                                                                          APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
                                                                        CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
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ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
                 TYPE: DNA
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00.0%; Pred. No.
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                                                                                                          US-09-280-799-58
                                                                                                                                                                                  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 58
LENGTH: 20
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SEQ ID NO 57
LENGTH: 20
TYPE: DNA
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Best Local Similarity
Matches 20; Conserv
                                                                          Query Match
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Patent No. 6136603
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APPLICANT: Dean, Nicholas N
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                              Matches
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Best Local Similarity
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TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
                                                                                                                                                                                                                                                                                                                             APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Dean, Nicholas M.
                                                                                                              FEATURE: OTHER INFORMATION: Description of Artificial Sequence:Synthetic
                                                                                                                                                      ORGANISM: Artificial Sequence
                                                                                                                                                                        TYPE: DNA
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                                                          Local Similarity
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2135 AAGACGGAGAGTAAACCAAT 2154
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                                              Conservative
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RESULT 63
US-09-280-799-59/c
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US-09-280-799-61/c
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US-09-280-799-60
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                                 Sequence 61, Application US/09280799 Patent No. 6136603
                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 60
LENGTH: 20
GENERAL INFORMATION: APPLICANT: Dean, Ni
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Best Local (
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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APPLICANT: MCKAY, ROBERT
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
FILE REFERENCE: ISPH-0340
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
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5. 6136603
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TITLE OF INVENTION: ANTISENSE MODULATION OF TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 61
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Sequence 63, Application US/09280799
Patent No. 615603
GENERAL INFORMATION:
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US-09-280-799-62
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Matches
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SEQ ID NO 62
LENGTH: 20
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APPLICANT: Dean, Nicholas M.
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
FILLE OF INVENTION: TRANSDUCTION
FILLE REFERENCE: ISH-0340
CURRENT APPLICATION UNMEER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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NUMBER OF SEQ ID NOS: 208
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APPLICANT: McKay, Robert
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APPLICANT: MCKay, Robert
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; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence:Synthetic

US-09-280-799-63
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-65
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Best Local Similarity
Matches 20; Conserv
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LENGTH: 20
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Patent No. 6136603
GENERAL INFORMATION:
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LENGTH: 20
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GENERAL INFORMATION:
                                                                                                                                                           FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                            APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: Karras, James G
APPLICANT: KCKAy, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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                                                                            TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
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100.0%; Pred. No. 57
:ive 0; Mismatches
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US-09-280-799-66/c
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CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 66
LENGTH: 20
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SEQ ID NO 67
LENGTH: 20
TYPE: DNA
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GENERAL INFORMATION:
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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NUMBER OF SEQ ID NOS: 208
                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/280,799
                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0340
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                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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                                                                                                                              FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:Synthetic
                                                                                                                                                                          ORGANISM: Artificial Sequence
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Query Match

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RESULT 73
US-09-280-799-69/c
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Matches
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Best Local Similarity
Matches 20; Conserv
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SEQ ID NO 68
LENGTH: 20
                                                                                        GENERAL INFORMATION:
                                                                                                          Sequence 70, Application US/09280799 Patent No. 6136603
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Best Local
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APPLICANT: Dean, Nicholas M.
APPLICANT: KATTAS, JAMES G
APPLICANT: MCKAY, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
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APPLICANT: McKay, Robert
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APPLICANT: McKay, Robert
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TYPE: DNA
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ORGANISM: Artificial Sequence
FEATURE:
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Pred. No.
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US-09-280-799-71/c
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 71
LENGTH: 20
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CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 70
LENGTH: 20
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Patent No. 6727064
GENERAL INFORMATION:
APPLICANT: Karras, James G
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SEQ ID NO 152
LENGTH: 20
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Best Local Similarity
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Best Local Similarity
                                               CURRENT APPLICATION NUMBER: US/09/758,881
CURRENT FILING DATE: 2001-01-11
PRIOR APPLICATION NUMBER: PCT/US00/09054
PRIOR FILING DATE: 2000-04-06
PRIOR PRIOR APPLICATION NUMBER: 09/288,461
PRIOR APPLICATION NUMBER: 09/288,461
PRIOR FILING DATE: 1999-04-08
NUMBER OF SEQ ID NOS: 152
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US-09-371-615A-4/c
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US-09-280-799-15/c
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                                                                                           ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-15
                                                                                                                                                                 APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 15
LENGTH: 20
TYPE: NUM
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SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 4
LENGTH: 22
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Best Local Similarity
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APPLICANT: IDEXX LABORATORIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                     Sequence 15, Application US/09280799 Patent No. 6136603 GENERAL INFORMATION:
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                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING TITLE OF INVENTION: CANINE INTERLEUKIN 5 FILE REFERENCE: 03604001700US00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: PCR primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
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                                                                                                                                                           TYPE: DNA
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1986 TAAAGAAATACATTGACGGC 2005
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100.0%; Pred. No.
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Pred. No. 70;
                                             Score 18.4;
Pred. No. 69;
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57;
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US-09-280-799-72/c
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US-09-280-799-75/c
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RESULT 81
US-09-371-615A-3
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-75

    Matches

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FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKAY, ROBERT
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 75
LENGTH: 20
TWOTE: NUMBER: 100 TERMS TO THE TERMS 
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Best Local Similarity
Matches 19; Conserv
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Patent No. 6136603
GENERAL INFORMATION:
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Best Local Similarity
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APPLICANT: McKay, Robert
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TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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Pred. No. 69;
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Pred. No. 69;
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Sequence 3, Application US/09371615A Patent No. 6537781 GENERAL INFORMATION:

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RESULT 82
US-08-319-492B-703
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Matches
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CURRENT APPLICATION NUMBER: US/09/371,615A
CURRENT FILING DATE: 1999-08-10
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 3
LENGTH: 20
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                                                                                                           APPLICATION NUMBER: US/08/319,492B
FILING DATE: October 7, 1994
PRIOR APPLICATION DATA: including appli
PRIOR APPLICATION DATA: described below
APPLICATION NUMBER: 08/008,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 209/276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Sulliva
APPLICANT: Draper,
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
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ORGANISM: Canis familiaris
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                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Word Perfect
CURRENT APPLICATION DATA:
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                                                      TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM Com
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: Suite 4700
CITY: Los Angeles
STATE: California
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                                        67-3510
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3: Lyon & Lyon
633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  McSwiggen, James
Stinchcomb, Dan T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         U.S.A.
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                                                                                                                                                                                                                                                               including application described below:
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Pred. No. 69
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                                                         US-08-319-492B-705
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Best Local Similarity 72.2
               Query Match
Best Local Similarity
 Matches
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APPLICATION NUMBER: US/08/319,492B

FILING DATE: October 7, 1994

PRIOR APPLICATION DATA: including appl
PRIOR APPLICATION DATA: described belo
APPLICATION NUMBER: 08/008,895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
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                                                                                                                                                    TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
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TITLE OF INVENTION: 1
TITLE OF INVENTION: 1
                                                                                                     SEQUENCE CHARACTERISTICS LENGTH: 18 base pairs TYPE: nucleic acid
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MEDIUM TYPE: 3.5" Di
MEDIUM TYPE: storage
COMPUTER: IBM Compat
                                                                                                                                                                                                                                                                        FILING DATE: December 7, 1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                             TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 633 West F11
STREET: Suite 4700
CITY: Los Angeles
STATE: California
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                                                                                                                                                    TELEFAX: 1411
TELEFAX: 67-3510
                                                                                                                                                                  TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM:
SOFTWARE: Word Pe
                                                                                                                                                                                                                           NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 20
                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/008, FILING DATE: January 19, 19, APPLICATION NUMBER: 07/989
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TOPOLOGY: linear
                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 90071
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       588 TGGAGCTGCCTACGTGTA 605
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/08319492B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Lyon & Lyon
633 West Fifth Street
0.6%;
nilarity 61.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    McSwiggen, James
Stinchcomb, Dan T.
Stinchcomb, Dan T.
VENTION: RIBOZYME TREATMENT OF DISEASES
VENTION: OR CONDITIONS RELATED TO LEVELS
VENTION: OF IL-5
EQUENCES: 751
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sullivan, Sean M.
Draper, Kenneth G.
                                                                                                                                                                                                                                                                                                                                                                                                                                        SYSTEM: IBM P.C. Word Perfect 5.1
                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.5" Diskette, 1.44 Mb
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                                                                                                                                                                                                                                                                                                                       19, 1993
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               Score 18; Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DOS 5.0
   Mismatches
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US-08-319-4928-709
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                                                                                                                                                                                                                                                Matches
GENERAL INFORMATION:
APPLICANT: Sulliva
APPLICANT: Draper,
APPLICANT: McSwigg
                                                                          Sequence 709, Application US/08319492B Patent No. 5616488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jeque...
Patent No. 5510
Patent No. 5510
Sul
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/008,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/31:
FILING DATE: October 7, 1994
PRIOR APPLICATION DATA: includ
PRIOR APPLICATION DATA: descrii
PRIOR APPLICATION DATA: descrii
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OPERATING SYSTEM: IBM P.C.
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Sullivan, Sean M.
APPLICANT: Draper, Kenneth G.
APPLICANT: MCSwiggen, James
APPLICANT: Stinchcomb, Dan T.
TITLE OF INVENTION: RIBOZYMB TREATMENT OF DISEASES
TITLE OF INVENTION: OR CONDITIONS RELATED TO LEVELS
TITLE OF INVENTION: OF IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Lyon & Lyon STREET: 633 West Fifth Street STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Warburg, Richard REGISTRATION NUMBER: 32,327 REFERENCE/DOCKET NUMBER: 209/276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (213) 489-16
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                           674 GAACTCTGCTGATAGCCA 691
                                                                                                                                                                                                                                                              14; Conservative
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California
                                                                                                                                                                                       GAACUCUGCUGAUAGCCA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67-3510
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Sullivan, Sean M.
Draper, Kenneth G.
McSwiggen, James
                                                                                                                                                                                                                                                                               0.6%;
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                                                                                                                                                                                                                                                          Score 18; DB 1;
Pred. No. 67;
4; Mismatches
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US-08-434-503-42
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 42, Application US/08434503 Patent No. 5616490
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FILING DATE: October 7, 1994

PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below:
APPLICATION NUMBER: 08/008,895

FILING DATE: January 19, 1993

APPLICATION NUMBER: 07/989,849

FILING DATE: Jecember 7, 1992

APPLICATION NUMBER: 07/989,849

FILING DATE: December 7, 1992

APPLICATION NUMBER: 03/989,849

FILING DATE: January 19, 1993

APPLICATION NUMBER: 03/989,849

APPLICATIO
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Best Local Similarity 61.1%;
Matches 11; Conservative
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                           APPLICANT: Kenneth G. D
TITLE OF INVENTION: MET.
TITLE OF INVENTION: TRE.
TITLE OF INVENTION: DIS:
TITLE OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
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TITLE OF INVENTION: F
TITLE OF INVENTION: C
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TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
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MEDIUM TYPE: 3.5" Diskette,
MEDIUM TYPE: storage
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COMPUTER READABLE FORM:
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CITY: Los Angeles
STATE: California
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STREET: 633 West Fifth Street
                              COUNTRY: 1
                                                                                           CITY: Los Angeles
STATE: California
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611 West Sixth Street
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VENTION: RIBOZYME TREATMENT OF DISEASES
VENTION: OR CONDITIONS RELATED TO LEVELS
VENTION: OF IL-5
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                                                                                                                                                                                                                                                                                                                                                                                                                    Sullivan
                                                                                                                                                                                                                                                                                          DISEASE
                                                                                                                                                                                                                                                                                                                     G. Draper
METHOD AND REAGENT FOR
TREATMENT OF INFLAMMATORY
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Pred. No.
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67;
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CLASSIFICATION:
CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: WATDUIG, Richard J.
NAME: WATDUIG, Richard J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 13; Conservative
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FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REGISTRATION NUMBER: 200/276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Sean M
APPLICANT: Kennet
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                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: ISM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
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SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION MITMANN M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
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TITLE OF INVENTION:
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
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Local Similarity 72.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
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STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM CON
OPERATING SYSTEM:
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611 West Sixth Street
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sean M. Sullivan
Kenneth G. Draper
VENTION: METHOD AND REAGENT FOR
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Pred. No. 67;
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RESULT 88
US-08-434-503-51/c
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Best Local Similarity
Matches 12; Conserv
Query Match 0.6%; Score 17.8; [Best Local Similarity 75.9%; Pred. No. 90; Matches 22; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No. 5616490 GENERAL INFORMATION:
                                                                                                                                                                                                                  APPLICATION UNMBER: US/08/434,503
APPLICATION: 435
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILLING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 67-3510 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                    TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Sean M. Sulli
APPLICANT: Kenneth G. D.
TITLE OF INVENTION: TREE
TITLE OF INVENTION: TREE
TITLE OF INVENTION: DISS
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 90017
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: WordPerfect
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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TELEFAX: 67-3510
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CITY: Los Angeles
STATE: California
COUNTRY: USA
                                                                                                                                                                                        TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM Con
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear
                                                                                                 STRANDEDNESS: single
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                                                                                                                                    LENGTH:
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                                                                                                                 nucleic acid
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611 West Sixth Street
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Sean M. Sullivan
Kenneth G. Draper
NVENTION: METHOD AND REAGENT FOR
NVENTION: TREATMENT OF INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (213) 955-0440
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SYSTEM: IBM MS-DOS (Version 5.0) WordPerfect (Version 5.1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.5" Diskette, 1.44 Mb storage
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Pred. No.
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67;
                                 DB 1; Length 33;
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US-08-420-244-4
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                                                                                                                                                                                                                                      Sequence 5, Application US/09259411
Patent No: 6489306
                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
       APPLICANT: Matsuse, Hiroto
APPLICANT: Matsuse, Hiroto
APPLICANT: Matsuse, Hiroto
APPLICANT: Kumar, Mukesh
TITLE OF INVENTION: METHOD OF INTRANASAL GENE TRANSFER FOR PROTECTION
TITLE OF INVENTION: AGAINST RESPIRATORY INFECTION
FILE REFERENCE: 0152.00312
CURRENT FILING DATE: 1999-02-23
PRIOR APPLICATION NUMBER: 05/075,588
PRIOR APPLICATION NUMBER: 60/075,588
PRIOR FILING DATE: 1998-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Hu, SP
                                                                                                                                             APPLICANT: Mohapatra, Shyam S. APPLICANT: Matsuse, Hiroto APPLICANT: Behara, Aruna K. APPLICANT: Kumar, Mukesh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: T880, Y. Rocky
REGISTRATION NUMBER: 34,053
REFERENCE/DOCKET NUMBER: 0063
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Palana
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/420,244
FILING DATE: 07-APR-1995
CLASSIFICATION: 514
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STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 02110-2804
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
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Pred. No. 75;
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; OTHER INFORMATION: Description of Artificial Sequence: primer US-09-259-411-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-434-503-39
                                                                                                                                      US-08-434-503-39
                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION PATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
APPLICATION NUMBER: 03/327
REFERENCE/DOCKET NUMBER: 32,327
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 320/276
TELECOMMUNICATION INFORMATION:
TELECHANCE: (213) 489-1600
TELEFAX: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5%;
Best Local Similarity 94.7%;
Matches 18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 39, Application US/08434503 Patent No. 5616490
                                                                    Matches
                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 5.20
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMAT'
TITLE OF INVENTION: DISEASE
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Sean M. APPLICANT: Kenneth
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CITY: I
                                                                                                                                                                                                                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 90017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                  Local Similarity
                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                           TYPE:
                                                                                                                                                                                                                                                                 TELEX:
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                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                          ENGTH:
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                               518 CTTTGCCAAAGGCAAAC 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SSEE: Lyon & Lyon
T: 611 West Sixth Street
Los Angeles
: California
                                                                                                                                                                       nucleic acid
EDNESS: single
CUUUGCCAAAGGCAAAC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGATGCTTCTGCACTTGA 20
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                                                                    Conservative
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                                                                                  Score 17;
Pred. No.
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Pred. No. 77;
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                                                                      Mismatches
                                                                                                       DB 1;
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RESULT 94
US-08-358-171-14
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Best Local Similarity
"hes 17; Conserve
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                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-259-411-6
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US-09-280-799-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION UNMERE: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 16
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6
LENGTH: 18
Sequence 14, Application US/08358171 Patent No. 5763578
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Best Local Similarity 90.0%;
Matches 18; Conservative
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APPLICANT:
APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/259,411
CURRENT FILING DATE: 1999-02-23
PRIOR APPLICATION NUMBER: 60/075,588
PRIOR FILING DATE: 1998-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: METHOD OF INTRANASAL GENE TRANSFER FOR PROTECTION TITLE OF INVENTION: AGAINST RESPIRATORY INFECTION FILE REFERENCE: 0152.00312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                         2168 GCAAGAGTTTCTTGGTGT 2185
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Behera, Aruna K.
Kumar, Mukesh
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Pred. No. 81;
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Pred. No. 82
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US-09-090-947-14
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INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                               Sequence 14, Applicat Patent No. 6008338 GENERAL INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/358,171
FILING DATE: 16-DEC-1994
CLASSIFICATION: 530
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                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/090;947
                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
                                                                                                                                                                                                                                                                                                          APPLICANT: FONG, Henry K.W.
TITLE OF INVENTION: ALL TRANS-RETINALDEHYDE BINDING PROTEIN, DNA
TITLE OF INVENTION: ENCODING SAME, AND ANTIBODIES THERETO
NUMBER OF SEQUENCES: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: oligonucleotide
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TELEPHONE: 202-737-3528
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TITLE OF INVENTION: ALL TRANS-RETINALDEHYDE BINDING PROTEIN,
TITLE OF INVENTION: ENCODING SAME, AND ANTIBODIES THERETO
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                             STREET: 419 Sever CITY: Washington STATE: D.C.
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REGISTRATION NUMBER: 37,971
REFERENCE/DOCKET NUMBER: FO
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ZIP: 20004
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               CLASSIFICATION
                                  FILING DATE:
                                                                                                                                                                                                                                                                          ADDRESSEE:
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419 Seventh Street, N.W., Suite 300
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Pred. No. 86;
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TELEFAX: 20.
TELEFAX: 248633
TELEX: 248633
INPORMATION FOR SEQ ID NO: 14
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
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Patent No. 6559294
GENERAL INFORMATION:
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Patent No. 6048726
GENERAL INFORMATION:
                            APPLICANT: Weltman, Joel K.
APPLICANT: Karin, Aftab S.
TITLE OF INVENTION: INHIBITION OF EOSINOPHILIC INFLAMMATION
FILE REFERENCE: 0998/002001
CURRENT APPLICATION NUMBER: US/09/079,839
CURRENT FILING DATE: 1998-05-15
NUMBER OF SEQ ID NOS: 2
SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
LENGTH: 16
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Best Local Similarity
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LENGTH: 20
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ORGANISM: Chlamydia pneumoniae
-09-198-452A-5483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Griffais, R.
APPLICANT: Griffais, R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, frag
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis,
TITLE OF INVENTION: and treatment of infection
FILE REFERENCE: 9710-003-999
FULCATION NUMBER: US/09/198,452A
CURRENT FILING DATE: 1998-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 6849
TYPE: DNA
ORGANISM: Homo sapiens
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Pred. No. 86;
0; Mismatches
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Pred. No. 86;
O; Mismatches
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RESULT 98
US-09-322-409-134
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Best Local Similarity 100.
Matches 16; Conservative
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LENGTH: 16
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GENERAL INFORMATION:
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Patent No. 6482403
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Patent No. 6471957
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EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILLING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILLING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILLING DATE: 1998-05-29
                                                                                                                                                                                                                                                                            APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: CANINE AND FELII
TITLE OF INVENTION: ACID MOLECULES,
FILE REFERENCE: IM-2-Cl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Sim, Gek-Kee APPLICANT: Yang, Shumin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                     ORGANISM: Artificial Sequence
                                                              TYPE:
OTHER INFORMATION: Description of Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  561 GCTTCTGCATTTGAGT 576
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                                                                                                                        PatentIn Ver.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09451527
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78;
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; OTHER INFORMATION: Primer US-09-451-527-134

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                                                                                                                                                                            US-09-331-347C-5/c
                                                                                                                                                                                                RESULT 103
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                                                                                                                 Sequence 5, Application US/09331347C Patent No. 6617431 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 53, Appli
Patent No. 5616490
                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/ACENT INFORMATION:
APPLICANT: Meristem Therapeutics, S.A.
APPLICANT: Meristem Therapeutics, S.A.
TITLE OF INVENTION: Recombinant Collagens and Derived Proteins Produced by Plants,
TITLE OF INVENTION: obtaining Such and Their Uses
FILE REFERENCE: 1149-3
CURRENT APPLICATION NUMBER: US/09/331,347C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (213) 955-04-
TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
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APPLICANT: Kenneth G. DI
TITLE OF INVENTION: METI
TITLE OF INVENTION: TREJ
TITLE OF INVENTION: DISS
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 2000/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: Wordberfect (Version 5.1)
CURRENT APPLICATION DATA,
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
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STREET: LOB Angeles
CITY: LOB Angeles
CTATE: California
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TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 29
TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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611 West Sixth Street
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METHOD AND REAGENT FOR
TREATMENT OF INFLAMMATORY
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Pred. No.
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Sequence 5006, Application US/09422978
Patent No. 6537751
GENERAL INFORMATION:
APPLICANT: Cohen, Daniel
APPLICANT: Chumakov, Ilya
APPLICANTION: Balalelic markers for use in
FILLE REFERENCE: GENSET:020CP1
CURRENT APPLICATION NUMBER: US/09/422,978
CURRENT FILING DATE: 1999-04-21
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER APPLICATION NUMBER: US 60/082,614
EARLIER APPLICATION NUMBER: US 60/082,614
EARLIER FILING DATE: 1998-04-21
NUMBER OF SEQ ID NOS: 11796
SEQ ID NO 5006
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US-09-198-452A-5765/c
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                                                                                                                                                                            Sequence 5765, Application US/09198452A
Patent No. 6559294
GRMERAL INFORMATION:
APPLICANT: Griffais, R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragment;
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prev,
TITLE OF INVENTION: and treatment of infection
FILE REFERENCE: 9710-003-999
CURRENT APPLICATION NUMBER: US/09/198,452A
CURRENT APPLICATION NUMBER: US/09/198,452A
CURRENT FILING DATE: 1998-11-24
NUMBER OF SEQ ID NOS: 6849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 16
                                                                                           SEQ ID NO 5765
LENGTH: 20
TYPE: DNA
ORGANISM: Chlamydia pneumoniae
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NAME/KEY: primer bind
LOCATION: 1..19
TNEORMATION: ups
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    Best Local
Matches
                                           Query Match
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  Similarity 100
16; Conservative
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                  0.5%; Score 16; DB
100.0%; Pred. No. 89;
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  Mismatches
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Gaps
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CURRENT FILING DATE: 1999-08-17;

NUMBER OF SEQ ID NOS: 22

SOFTWARE: PatentIn version 3.1;

SEQ ID NO 5

LENGTH: 17

TYPE: DNA

ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Match
Best Local Similarity 94.1%; Pred. No. 87;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Match
Best Local Similarity 94.1%; Pred. No. 87;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Match
Best Local Similarity 94.1%; Pred. No. 87;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Match
Best Local Similarity 94.1%; Pred. No. 87;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Match
Best Local Similarity 94.1%; Pred. No. 87;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Match
Best Local Similarity 94.1%; Pred. No. 87;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7

US-09-331-347C-5

Query Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OTHER INFORMATION: oligonucleotide BIOC7
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Best Local S
Matches 20
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                                                                                                                                                                                   Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABX04364 standard;
                                                                                                                                                                                                                                                                                                                                                                            07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Interleukin 5 antisense oligonucleotide ISIS 16095
                                                                                                                                                                                                                                                           Dean
                                                                                                                                                                                                                                                                                                                                           26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ss; antisense; interleukin 5; IL-5 suppressant; eosinophilic syndrome;
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MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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                                                                                                                                                                                                                                                           Manoharan
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1.1e+02;
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The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a in mammalian cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with II-5 signal transduction,

receptor a expression,

the disease

Claim

4; Page

19; 77pp;

English

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RESULT 118
RBX04352/c
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                   length, which modulates interleukin (IL)-5 signal transduction. Also conclude are a pharmaceutical composition comprising the antisense of ligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian cells or tissues, treating a mammalian cells or tissues, treating a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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Best Local S
Matches 20
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(KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             which alters splicing of an RNA encoding IL-5 recepts for treating a mammal having a disease or condition. is an antisense oligonucleotide targetting human IL5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
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KARRAS J G.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCKAY R.
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Pred. No.
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. 1.1e+02;
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                                                                           The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense coligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, treating a mammalian chaving a disease or condition associated with II-5 signal transduction, II-5 expression or II-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding II-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human II5
                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                             Novel antisense compound for treating disease/condition e.g. eosisyndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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17-MAR-2000;
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) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
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2000WO-US007318.
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                                                                                                                                                                     The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (II)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of II-5 receptor a. The antisense compound is useful CC for modulating II-5 signal transduction, modulating expression of CC mammalian II-5 or modulating the expression of mammalian II-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CC in ference or condition associated with II-5 signal transduction, CC II-5 expression or II-5 receptor a expression, where the disease or condition associated with II-5 signal transduction, CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding II-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence CC is an antisense oligonucleotide targetting human II5
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   Matches
                                                             Query Match
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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                                                                                                                       Sequence
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                                                                                                                       BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 19;
   Conservative
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                                1.1e+02;
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RESULT 121
ABX04345/c
ID ABX04345 standard; DNA;
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                                                                                            Query Match
Best Local S
Matches 20
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                                                                                                                                                                                           Sequence 20
                                                                                                                                                                                                                                    IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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(KARR/)
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17-MAR-2000; 2000WO-US007318.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-JAN-2003
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                                           895 TCCTCTCCAGACTCTGAGGA 914
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KARRAS
                                                                                                                   Similarity
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                                                                                                                                                                                           BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
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                                                                                              Conservative
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                                                                                                                   0.6%; Score 20;
100.0%; Pred. No.
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ABX04354/c ID ABX043 XX

ABX04354 standard;

DNA;

20 ВP

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13-JAN-2003

(first

entry)

Human Interleukin 5 antisense oligonucleotide ISIS

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RESULT 122

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RESULT 123
ABX04367/c
ID ABX043
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Best Local (
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(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                           mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 19; 77pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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ABX04367;
                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                              ABX04367 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                      for treating a mammal having a disease or conditi
is an antisense oligonucleotide targetting human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transduction.
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                                                                                                                                                                                                                        1932 GTCANACTGTGCAAGGGGGT 1951
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KARRAS J G.

MCKAY R.
                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                            Conservative
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2000WO-US007318.
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Pred. No.
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. 1.1e+02
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RESULT 124
ABX04370/c
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
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                                                                                                                                               Human Interleukin 5 antisense oligonucleotide ISIS 16101.
                                                                                                                                                                                            13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
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17-MAR-2000; 2000WO-US007318
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                                                                              immunosuppressant;
                                                                                                       Human;
                                                                                                                                                                                                                                                                                  ABX04370
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) KARRAS J G.
) MCKAY R.
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                                                                                                                                                                                                                                                                                  standard;
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                                                                                antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
ressant; eosinophilic syndrome; asthma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                               DNA;
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eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.6%;
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C;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 G; 5 T;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; L
1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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밁 8

Homo sapiens

Human; 89;

13-JAN-2003 ABX04346;

(first entry)

US2002128216,-A1

Homo sapiens immunosuppressant; Human Interleukin 5 antisense oligonucleotide ISIS 16077

antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;

eosinophilic

syndrome;

ABX04346/c RESULT 125

ABX04346 standard; DNA; 20

ВP

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문
                                                                                                                                                                The invention relates to an antisense compound of 8-30 nucleobases in clength, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense coligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CC in cells or tissues, for altering the ratio of the isoforms of mammalian CC in receptor a in mammalian cells or tissues, treating a mammalian CC having a disease or condition associated with II-5 signal transduction, II-5 expression or II-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding II-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                 Query Match
Best Local &
                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-039602/03.
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17-MAR-2000; 2000WO-US007318
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(KARR/) KARRAS J
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                              1873 CCTCATTTAGCACCAACTGT 1892
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MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Page 19; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MANOHARAN M
                                                                                  Similarity
                                                                                                                                       20
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                                                                                                                                     BP; 6
                                                                    Conservative
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                                                                                                                                     A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                             0.6%; but
100.0%; Pr
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                                                                                      Score 20;
Pred. No.
                                                                                    Pred.
                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Manoharan
                                                                                                      DB 1;
                                                                                      1.1e+02;
                                                                                                    Length 20
                                                                    Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     length, which modulates interleukin (II)-5 signal transduction. Also conclude are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian chaving a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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17-MAR-2000; 2000WO-US007318
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               26-MAR-1999; 99US-00280799.
17-MAR-2000; 2000WO-US007318.
                                                        07-MAR-2001; 2001US-00800629
                                                                                                                   US2002128216-A1
                                                                                                                                              Homo sapiens. .
                                                                                                                                                                                        Human;
                                                                                                                                                                                                                    Human Interleukin 5 antisense oligonucleotide ISIS 16088
                                                                                                                                                                                                                                                  13-JAN-2003
                                                                                                                                                                                                                                                                                                          ABX04357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                                                           ımmunosuppressant;
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KARRAS J G.

MCKAY R.
                                                                                                                                                                                       ss; antisense;
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20; Conserv
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                                                                                                                                                                                                                                                                                                          standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                    ACTCTGAGGATTCCTGTTCC 924
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   relates to an antisense compound of 8-30 nucleobases
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                                                                                                                                                                           se; interleukin 5;
eosinophilic synd;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.6%;
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0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G; 3 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Manoharan
                                                                                                                                                                           syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 U;
                                                                                                                                                                                       IL-5; IL-5 receptor; antiasthmatic
                                                                                                                                                                                                                                                                                                                                                                                                                                          1.1e+02;
hes 0;
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include are a pharmaceutical composition comprising the antisense coligonucleotide and a pharmaceuticall composition comprising the antisense coligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian IL-5 receptor a condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an ANA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DEAN/) DEAN N M.
(KARR/); KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an antisense compound of 8-30 nucleobases
length, which modulates interleukin (IL)-5 signal transduction. Al
                                                                                                                                                                                                                                                                                                                                                                                                                                            Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dean NM
                                                                                                                                                                                                                                                                                                                                                                                                                                         20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Manoharan
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ä

á 밁 Query Match Best Local : Matches Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other; 2051 GCTGTGCCTATTTCTATGGA 2070 20; 20 Similarity GCTGTGCCTATTTCTATGGA 1 Conservative 100.0%; 0.6%; 0; Score 20; Pred. No. Mismatches DB 1; 1.1e+02; 0, Length 20; Indels 0, Gaps 0

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RESULT 127
ABX04369/c
ID ABX043
Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.
                                                                                                                                    Human Interleukin 5 antisense oligonucleotide ISIS
                                                                                                                                                   13-JAN-2003
                                                                                                                                                                  ABX04369;
                                                                                                                                                                               ABX04369 standard;
                                                                                                    Homo sapiens
                                                                                                                                                   (first
                                                                                                                                                                               DNA;
                                                                                                                                                   entry)
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(DEAN/) (KARR/)

(MCKA/)

DEAN N M.
KARRAS J G.
MCKAY R.
MANOHARAN M.

07-MAR-2001; 2001US-00800629

12-SEP-2002

US2002128216-A1

26-MAR-1999; 17-MAR-2000;

99US-00280799 2000WO-US007318

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Karras

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Mckay R,

Manoharan

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RESULT 128
ABX04341/c
ID ABX043
XX ABX043
XX ABX043
XX INTERPRISED INTERPRISED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 20
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17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                    WPI; 2003-039602/03
                                                                                                                                            Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-SEP-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human Interleukin 5 antisense oligonucleotide ISIS 16072.
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                                                                                                                                                                                                                                                 (KARR/)
                                                                                                                                                                                                                (MANO/)
                                                                                                                                                                                                                                                                                                                     (DEAN/)
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KARRAS J G.
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ss; antisense;
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                                                                                                                                                                                                                MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACATAAAAATGTAAGTTAAA 947
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                                                                                                                                        Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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2000WO-US007318.
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A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 C; 1 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      interleukin
                                                                                                                                            Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                            ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>..</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         syndrome;
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                                                                                                                                            Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
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The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CC in-5 receptor a in mammalian cells or tissues, treating a mammalian CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression or transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 20; Page 19; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        syndrome or asthma associated with interleukin-5 or IL-5 receptor
expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or IL-5 signal transduction,
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밁 र् Query Match Best Local & Matches 523 CCAAAGGCAAACGCAGAACG 20 20; Similarity CCAAAGGCAAACGCAGAACG Conservative 100.0%; 0, Score 20; Pred. No. 542 Mismatches 1.1e+02 DB 1; 0 Length 20, 0, Gaps

0

Sequence 20

BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;

RESULT 129
ABX04347/c
ID ABX043
XX ABX043
XX ABX043
XX Human
XX Human
XX Human
XX Homo B
XX ICAN
DE HUMAN
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PT SYNdre Homo sapiens ABX04347 standard; DNA; Human; 88; 13-JAN-2003 ABX04347; immunosuppressant; Interleukin 5 antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; (first eosinophilic syndrome; asthma antisense oligonucleotide ISIS 16078 entry) 20 ВP

US2002128216-A1.

12-SEP-2002

07-MAR-2001; 2001US-00800629

26-MAR-1999; 17-MAR-2000; 2000WO-US007318 99US-00280799

(DEAN/) DEAN N M. (KARR/) KARRAS J G. (MCKA/) MCKAY R. (MANO/) MANOHARAN M.

Dean NM, Karras JG, Mckay ₩, Manoharan

WPI; 2003-039602/03

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal transduction.

Example 20; Page 19; 77pp; English

antisense compound

for

treating

disease/condition e.g.

eosinophilic

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RESULT 130
ABX04351/c
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human Interleukin 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX04351 standard;
                                                                                                      Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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(KARR/)
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                                                                                                                                                                                                                                                                                                 26-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     immunosuppressant;
                                                                                                                                                                                                                  (MANO/)
                                                                                                                                                                                                                                 MCKA/)
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KARRAS J G.

MCKAY R.
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                                                                                                                                                                                      Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                 99US-00280799
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                                                                                                                                                                                                                                                                                                                                                                                                                                        eosinophilic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     interleukin 5;
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; Pred. No. 1.1;
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                oligonucleotide ISIS 16082.
                                                                                                                                                                                       Manoharan
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The invention length, which include are a

relates to an antisense compound of 8-30 nucleobases modulates interleukin (IL)-5 signal transduction. Al modulates interleukin (no comprising the antisense de and a pharmaceutically acceptable carrier or diluc

nucleobases

The invention relates to an antisense compound of 8-30 nucleobases i length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent a diagnostic kit for detecting the expression level of the membrane versus soluble form of IL-5 receptor a. The antisense compound is us for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 recept in cells or tissues, for altering the ratio of the isoforms of mamma

diluent, and

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useful

Example

20; Page 19;

77pp; English.

diluent,

Example

English

length, which mo include are a pl oligonucleotide

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RESULT 131
ABXO4360/c
ID ABXO43
XX ABXO43
XX ABXO43
XX ABXO43
AC ABXO43
XX Human;
XX Human;
XX Human;
XX Human;
XX Immuno
XX Homo s
PN US2002
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Matches 20
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                                                                                                                                                                                                                                                                                                                     Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal transduction.
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17-MAR-2000; 2000WO-US007318.
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) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
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Pred. No. 1.1
Mismatches
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RESULT 132
ABX04363/c
ID ABX043
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Best Local :
                                           The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a in mammalian cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, trasting a mammalian having a disease or condition associated with II-5 signal transduction,
                                                                                                                                                                                                                                                                                  Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or
IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compwhich alters splicing of an RNA encoding IL-5 receptor a is also us
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17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                        Example
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immunosuppressant; eosinophilic
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KARRAS J G.
MCKAY R.
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sinophilic syndrome; asthma.
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RESULT 133
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                      CC length, which modulates interleukin (IL)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC a diagnostic kit for detecting the expression level of the membrane form CC expression soluble form of IL-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of CC in cells or tissues, for altering the expression of the isoforms of mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC in spression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC in an antisense oligonucleotide targetting human IL5
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                  Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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17-MAR-2000;
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RESULT 134
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                                                                                          IL-5-expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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17-MAR-2000; 2000WO-US007318
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KARRAS J G.
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                                                                                                                        Sequence 20 BP; 2 A; 5 C; 3 G; 10 T; 0 U; 0 Other;
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immunosuppressant; eosinophilic syndrome; asthma.
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
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                                                              20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                           20; Page 19; 77pp; English.
                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Karras JG,
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                                              0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                              <u>.</u>
                                                                                               Score
                                                                               Pred.
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                                                              Mismatches
                                                                               . No.
                                                                               1.1e+02;
                                                                                               DB 1;
                                                                0
                                                                                             Length 20;
                                                                Indels
                                                                0
                                                                Gaps
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1988 AAGAAATACATTGACGGCCA 2007

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ABX04356/c
ID ABX043
XX ABX043
AC ABX04
AC
RESULT 137
ABX04362/c
ID ABX043
XX
AC ABX043
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an antisense compound of 8-30 nucleobases in clength, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense coligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian chaving a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                             ABX04362;
                                                                                                    ABX04362 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-MAR-1999; 99US-00280799.
17-MAR-2000; 2000WO-US007318.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAR-2001; 2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Interleukin 5 antisense oligonucleotide ISIS 16087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-JAN-2003
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                                                                                                                                                                                                                                                                                                              CGGCCAAAAAGTAAGTTACA 2021
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Page 19;
                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                   0.6%;
                                                                                                          DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 C; 4 G; 9 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                   Score 20;
Pred. No.
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RESULT 138
ABX04343/c
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Best Local (
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                      condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 ecceptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with II-5 signal transduction, II-5 expression or II-5 receptor a expression, where the disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                         Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human;
                                                                                                                       ABX04343 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-039602/03
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                                                                                                                                                                                                                               2269 TGCAGTGAGAATGAGGGCCA 2288
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                                                                                                                                                                                                                                                               20;
                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
ressant; eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                         BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                               Conservative
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Pred. No.
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                                                                                                                                                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                              DB 1;
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Human Interleukin 5 antisense oligonucleotide ISIS 16074.

13-JAN-2003 ABX04343;

(first

entry)

0

88;

antisense; interleukin 5;

IL-5; IL-5 receptor; antiasthmatic;

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                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                     ABX04366 standard;
                                                                                                                                                                                                                                                                                                                                                                              Seguence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 20; Page 19; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transduction.
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                            Homo sapiens
                                                                                                                                                            ABX04366;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2002128216-A1
                                                                                                  Human
                                                                                                                               13-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DEAN/)
                                                      mmunosuppressant;
                                                                                                                                                                                                                                                                                        889
                                                                                                Interleukin 5 antisense
                                                                                                                                                                                                                                                              20
                                                                    88; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic,
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MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MANOHARAN M.
                                                                                                                                                                                                                                                                             GCCAATGAGGTAATTTTCTT
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                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                             BP; 8 A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          eosinophilic syndrome; asthma.
                                                        eosinophilic syndrome;
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                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                  0.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mckay R,
                                                                                                                                                                                       20
                                                                                                                                                                                       ВP
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                                                                                                                                                                                                                                                                                                                                  Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                        707
                                                                                                oligonucleotide ISIS 16097.
                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                    1.1e+02;
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RESULT 140 ABX04340/c ID ABX043

ABX04340 standard; DNA; 20

ВP

13-JAN-2003

(first entry)

ABX04340

Human

Interleukin 5

S 밁

523

CCAAAGGCAAACGCAGAACG 542 CCAAAGGCAAACGCAGAACG

20

Matches

20;

Conservative

0

0

<u>..</u>

Gaps

0

100.0%; 0.6%;

Score 20; DB 1; I Pred. No. 1.1e+02; Mismatches

Length 20

Query Match Best Local Similarity

Human; 88; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.

antisense oligonucleotide ISIS 16071.

07-MAR-2001; 2001US-00800629

US2002128216-A1

12-SEP-2002

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CC The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (IL)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC or modulating IL-5 signal transduction, modulating expression of CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a. The artic of the isoforms of mammalian CC in cells or tissues, for altering the ratio of the isoforms of mammalian CC in-5 receptor a in mammalian cells or tissues, treating a mammalian CC IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence CC is an antisense oligonucleotide targetting human IL5
Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                            Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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(KARR/)
(MCKA/)
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17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) DEAN N M.
) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Karras JG,
BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-00280799
2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Manoharan
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RESULT 141
ABX04349/c
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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(KARR/)
(MCKA/)
                                            26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                  ABX04349 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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17-MAR-2000;
                                                                                        07-MAR-2001; 2001US-00800629
                                                                                                                                                    US2002128216-A1.
                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                            Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                        Human Interleukin 5 antisense oligonucleotide ISIS 16080
                                                                                                                                                                                                                                                                                        13-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dean NM
(DEAN/) DEAN N M.
(KARR/) KARRAS J G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          509
                                                                                                                                                                                                                                                                                                                                                                                                                            20
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) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                           ATGCACTTTCTTTGCCAAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGCACTTTCTTTGCCAAAG 528
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 7 A;
                                                                                                                                                                                                                                                                                      (first entry)
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2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 20; DB; Pred. No. 1.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5 T;
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hes 0;
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RESULT 142
ABX04350/c
ID ABX04350/c
ID ABX04350/c
ID ABX043
XX ABX043
AC ABX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cc length, which modulates interleukin (IL)-5 signal transduction. Also conclude are a pharmaceutical composition comprising the antisense coligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form cross soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CI IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human ILS
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                                                                                      (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                             07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABX04350 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an antisense length, which modulates interleukin (I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 20; Page 19; 77pp; English.
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                           Dean NM
                                                                                                                                                                                                                                    26-MAR-1999; 99US-00280799.
17-MAR-2000; 2000WO-US007318.
                                                                                                                                                                                                                                                                                                                                                                                        12-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Interleukin 5 antisense oligonucleotide ISIS 16081
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1161 TTCCCAAAGAGCATCGTGTC 1180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
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MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCCCAAAGAGCATCGTGTC
                           Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  eosinophilic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%; Score 20;
100.0%; Pred. No.
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                           Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
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                              Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
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2003-039602/03

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal

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transduction

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RESULT 143
ABXO4365/c
ID ABXO43
XX ABXO43
XX ABXO43
XX Human
XX Human;
KW Immunc
XX Human;
KW Immunc
XX Homo E
XX US2002
XX US2002
XX 12-SEI
XX US2002
XX HOMO E
PF 07-MAF
XX (DEAN)
PA (MCAN)
PA (MCAN)
PA (MCAN)
PA (MANO)
XX Dean 1
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PT Syndr
PT Syndr
PT Syndr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an antisense compound of 8-30 nucleobases in clerity, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian criss or tissues, treating a mammalian conduction, and disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a is syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20
                                                                                                                                 (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                      26-MAR-1999; 99US-00280799.
17-MAR-2000; 2000WO-US007318.
                                                                                                                                                                                                                                   07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                   Human;
                                                                                                                                                                                                                                                                                                                                                                                                                         13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABX04365 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example
                                                                                                                                                                                                                                                               12-SEP-2002.
                                                                                                                                                                                                                                                                                         US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                  immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABX04365
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                                                                                                                                                                                                                                                                                                                                                                                            Interleukin 5
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                                                                                                                                                                                                                                                                                                                                               se; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
suppressant; eosinophilic syndrome; asthma.
                                                                                                                               KARRAS J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20;
                                                                                                                   MANOHARAN M
                                                                                                                                             DEAN N M.
KARRAS J G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Page 19; 77pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCCTGGTCATATTAAAATG 1426
                                                                                       Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 7 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                                                                                                                                                                                                                                                            antisense oligonucleotide ISIS 16096
                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
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                                                                                       Mckay
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВÞ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 20;
Pred. No.
                                                                                     Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20
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The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 or modulating the expression of mammalian in cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, treating a mammalian II-5 separate or condition associated with II-5 signal transduction, the state of the disease or condition associated with II-5 signal transduction, the state of the disease or condition associated with II-5 signal transduction, the state of the disease or condition associated with II-5 signal transduction, the state of the disease or the state of the state of the disease or the state of the 
                                                                                                 IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20; Page 19; 77pp; English
                                                                                                                                                                           present sequence
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Query Match
Best Local S
Matches 20
          509 ATGCACTTTCTTTGCCAAAG
20
                            20;
                                    Similarity
                            Conservative
                                    0.6%;
                            0;
                                    Score 20;
Pred. No.
_
              528
                            Mismatches
                                    1.1e+02;
                                           DB 1;
                            0,
                                           Length
                            Indels
                                           20;
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                            Gaps
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RESULT 144
ACF04469
ID ACF044469
XX ACF044
XX ACF044
XX Wolles
CC The p
PN WO200:
XX PD 24-JUJ
PF 20-JUJ
P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Real time PCR targeting IL-5 PCR primer F83.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
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24-JUL-2003

18-JAN-2002; 2002EP-00447009

20-JAN-2003; 2003WO-EP000493

(ULBR) UNIV LIBRE BRUXELLES

Stordeur P, Goldman 3

2003-598531/56.

Quantifying in vivo RNA from a biological sample for producing a medicament for treating immune related disease by determining in v levels of transcripts using nucleic acid/reverse transcription-PCR of transcripts using t mix in an automated setup. νίνο

42; 83pp; English.

The present invention relates to a method of quantifying in vivo RNA a biological sample. This involves collecting the biological sample it tube comprising a compound inhibiting RNA degradation and/or gene induction, forming a precipitate comprising nucleic acids, separating logical sample in and/or gene separating the from þ

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal

WPI; 2003-039602/03.

RESULT 145
ABZ95282/c
ID ABZ952
XX ABZ952
XX ABZ952
XX ABZ952
XX Human
XX H និនិនិនិនិនិនិនិនិនិនិនិនិនិ 밁 S precipitate from the supernatant, dissolving the precipitate using a buffer, forming a suspension, isolating nucleic acids from the suspension using an automated device, dispersing or distributing a reagent mix for reverse transcription (RT)-PCR using an automated device, dispersing or distributing the nucleic acids isolated within the dispersed reagent mix using an automated device and determining the in vivo levels of transcripts using the nucleic acid and RT-PCR reagent mix of the previous step in an automated setup. The method is useful for monitoring or detecting changes in in vivo nucleic acids levels in a biological agent present, such as eukaryotic or prokaryotic cells, viruses or phages in a biological sample or for producing a medicament for treating immune related disease, e.g., autoimmunity, rheumatoid arthritis, multiple sclerosis, cancer, immunodeficiencies such as ADDS, allergy, graft rejection or Graft versus Host Disease. The present sequence is a PCR primer/probe used in the exemplification of the invention Query Match Best Local S Matches 20 Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds. Human IL-5 17-OCT-2003 ABZ95282 24-APR-2001; 2001US-0286137P 23-APR-2002; 2002WO-US013135 WO200285308-A2 (EPIG-) sapiens. 591 μ l Similarity 20; Conserv Ś EPIGENESIS PHARM INC Li Y, Sa , Tang L, AGCTGCCTACGTGTATGCCA 610 20 standard; DNA; AGCTGCCTACGTGTATGCCA 20 antisense fragment no.1146. ВP; Conservative (first entry) 4 A; Sandrasagra A, L, Shahabuddin 6 100.0%; 0.6%; Ç 20 s Score 20; pred. No. ູດ 0 , Katz E, 5 T; Mismatches 0 U; 1.1e+02; hes 0; DB 1; 0 Other; Pabalan J, Length 20 Indels Aguilar 0 Ö Gaps

밁 Ş

CC nasal airway dysfunction and a second active agent comprising an CC antiinflammatory steroid and ubiquinone. A composition of the invention CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, CC immunosuppressive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapeutic respiratory effect of an CC antiinflammatory steroid in a subject, for reducing levels of adenosine CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or creceptor, producing bronchodilation, increasing levels of biquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, CC lung inflammation, lung allergies, or a respiratory disease or condition. CC Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO CC at ftp.wipo.int/pub/published_pct_sequences

Sequence 20 BP; 0 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

Query Match Best Local S Matches 20 20; h 0.6%; Similarity 100.0%; 20; Conservative 0; Score 20; Pred. No. Mismatches DB 1; 1.1e+02; 0 Length Indels 0 Gaps 0

0

RESULT 146 ABD19256/c ABD19256 standard; DNA; 20 ВÞ

Human ABD19256; 29-JUL-2004 ILS DNA (first fragment 1146. entry)

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysems; chronic obstructive pulmonary disease; bronchitis; pulmonary transplantation rejection; ds.

Homo sapiens.

WO200285309-A2

23-APR-2002; 2002WO-US013143

24-APR-2001; 2001US-0286036P

(EPIG-) EPIGENESIS PHARM INC

Nyce JW, Miller S ŝ Li Y, Tang Sandrasagra A, C, Shahabuddin , Katz. Pabalan ۲ Aguilar

WPI; 2003-093058/08

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic solds associated with lung airway or lung dysfunction, and nucleic acids associated bronchodilating agent. ç

Claim 15; SEQ ID NO 10524; 763pp; English

The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5° or 3° end genomic flanking regions, 5° and 3° intron-exon junctions, or regions within 2-10 nucleotides of 5° and 3° intron-exon junctions, or regions within 2-10 nucleotides of 5° and 3° intron-exon junctions, or regions within 2-10 nucleotides of 5° and 3° intron-exon junctions, or regions within 2-10 nucleotides of 5° and 3° intron-exon junctions, or regions within 2-10 nucleotides of 5° and 3° intron-exon junctions, or regions within 2-10 nucleotides of 5° and 3° intron-exon junctions, or regions within 2-10 nucleotides of 5° and 3° intron-exon junctions, or regions within 2-10 nucleotides of 5° and 5°

Disclosure; SEQ

日

NO 10524; 872pp;

English

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

This invention describes a no comprising oligonucleotides, describes a novel composition (a) a first active agent, gonucleotides, effective for alleviating ction, respiratory tract inflammation, allergies and

WPI;

2004-479669/45

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cc reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, cc surfactant depletion or hyposecretion, when administered to a mammal. The coligonucleotides are derived from a gene encoding or regulating cx expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. C The invention also describes a kit, that comprises: (A) a delivery cx device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, cc analgesic, hypotensive, immunosuppressive and cycostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or creating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to creduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung cinflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vascoonstriction, ceptiratory confinemation, allergies, asthma, impeded respiration, respiratory confinemation, allergies, asthma, impeded respiration, respiratory confinemation, emphysema, chronic obstructive pulmonary disease, pulmonary confinemation, respiration, respiration, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system c.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 147
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                              Human; interleukin-5; IL-5; 88; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'.O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20
                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                    (KARR/)
(MCKA/)
                                                                                                                                                            26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                    06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                        24-JUN-2004
                                                                                                                                                                                                                                                                                           US2004121376-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human interleukin-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADR12029 standard;
                                                                                                                                             07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3064 AACAAAAGGACAGAGAGACA 3083
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                                                                    MCKAY R.
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                                                 MANOHARAN M.
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llarity 100.0%;
Conservative
                                                                                                                                           99US-00280799.
2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          (IL-5) DNA antisense oligonucleotide #13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 20;
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Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Lc.
3. 1.1e+02;
0;
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Sequence 20

BP; 6 A;

2 C; 7 G; S T; 0 U; 0 Other;

0

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CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense coligonucleotide comprises at least one modified internucleoside linkage, ci.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio cof the isoforms of mammalian II-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CII-5 signal transduction or II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a. where the anticommunications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 20;
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RESULT 148
ADR12040/C
ID ADR120
XX ADR120
XX ADR120
XX Human
XX Human;
KW IL-5 x
KW 5-meth
KW 5-meth
KW 050inc
XX US2004
XX US2004
XX US2004
XX US2004
XX US2004
XX IL-6 XARR,
PR 17-MAI
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                    26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
   (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5-methylcytosine;
eosinophilic syndr
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                                                                                                                                                                                                                                                                 06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human interleukin-5 (IL-5) DNA antisense oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                 US2004121376-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        receptor a; phosphorothicate;
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   ) DEAN N M.
) KARRAS J G.
) MCKAY R.
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                                                                                                                                    99US-00280799
2000WO-US007318
2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2'-O-methoxyethyl
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sugar moiety;
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Dean NM

Karras JG,

Mckay

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Manoharan

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ADRIZOT 149
ADRIZO19/c
ID ADRIZO
XX ADRIZO
XX ADRIZO
XX Human
XX Human;
KW IL-5 r
KW 5-meth
KW eosino
XX Homo 8
XX US2004
XX HOMO 8
XX HOMO 11
XX HOMO 12
XX HOMO 12
XX HOMO 12
XX HOMO 13
XX HOMO 14
XX HOMO 15
XX HOMO 16
XX HOMO 17
XX 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 20
        26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           oligonucleotide targeted to a nucleic acid molecule encoding a mammaliar IL-5 or IL-5 receptor a, where the antisense compound its an antisense expression of mammalian IL-5 or IL-5 receptor a. The antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid at least modified ancar modifie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl s
5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human interleukin-5 (IL-5) DNA antisense oligonucleotide #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR12019 standard; DNA;
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                                                                                                                                                            06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                            24-JUN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eosinophilic syndrome; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MANOHARAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B₽;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
            2000WO-US007318
2001US-00800629
                                                                                    99US-00280799.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'n,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IL-5; 88; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6 T;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sugar moiety;
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CC Expression of mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense coligonucleotide comprises at least one modified internucleoside linkage, ci.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar molety, i.e. a 2'-O-methoxyethyl sugar molety, and at cleast one modified nucleobase, i.e. 5-methylcycosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with classes or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligonucleotide targeted to a nucleic acid molecule encoding IL-5 or IL-5 receptor a, where the antisense compound modula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 20;
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                                                 oligonucleotide
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MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ
                                                 sequence represents ide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ω.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to an antisense compound that modulates interleukin sduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            interleukin-5 signal transduction, in treating eosinophilic syndrome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a mammalian
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Sequence 20 B₽; 4 A, 6 C; 4 G; 6 T; 0 U; 0 Other;

밁 ঠ Query Match Best Local S Matches 20 540 ACGTTTCAGAGCCATGAGGA 559 20 l Similarity 20; Conserv ACGITTCAGAGCCATGAGGA 1 Conservative 0.6%; bu 100.0%; Pr Score 20; DB 1; Pred. No. 1.1e+(Mismatches 1.1e+02; 0 Length 20; Indels 0 Gaps 0

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RESULT 150
ADR12025
standard;
DNA,
ВP
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Human interleukin-5 (IL-5) DNA antisense oligonucleotide ADR12025; (first entry)

Human; interleukin-5; IL-5; ss; antisense oligonucleot IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl s 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic JS2004121376-A1 Homo sapiens syndrome; asthma; antiasthmatic; antisense oligonucleotide; 2'-0-methoxyethyl sugar moiety;

06-OCT-2003; 2003US-00679532

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an antisense compound that modulates interleukin CC -5 (IL-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar molety, i.e. a 2'-O-methoxyethyl sugar molety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a cC disease or condition characterised by a reduction in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 receptor a is modulated, the ratio of IL-5 creceptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a seguence receptor a seguence represents a human IL-5 DNA antisense and coligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
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17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                              ADR12033 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-479669/45.
                                  Homo sapiens
                                                                                                                                                Human interleukin-5 (IL-5) DNA antisense oligonucleotide #17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MCKA/)
                                                                               II-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar moiety;
5-methyloytosine; II-5 signal transduction; apoptosis;
                                                                                                                 Human; interleukin-5; IL-5; 88;
                                                                                                                                                                                  23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DEAN/)
(KARR/)
                                                                   eosinophilic
                                                                                                                                                                                                                                                                                                                                                                  964 TGATGGCATGAATAAGTAAA 983
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MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 5 A; 5 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 47; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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2000WO-US007318.
2001US-00800629.
                                                                                                                                                                               (first entry)
                                                                   syndrome; asthma; antiasthmatic;
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                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                  0.6%; Score 20;
100.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                 antisense oligonucleotide;
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                                                                                                                                                                                                                                                                                                                                                                                                                   1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 20;
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CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5 cc CC receptor a expression, or IL-5 receptor a soforms is altered, or expression of membrane IL-5 or IL-5 cc cuseful in promoting apoptosis and in treating esinophilic syndrome and CC useful in promoting apoptosis and in treating esinophilic syndrome and CC oligonucleotide of the invention.
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17-MAR-2000;
07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-JUN-2004
 Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-479669/45.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DEAN/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ) DEAN N M.
) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20; SEQ ID NO 55; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                             an antisense compound that modulates interleukin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   interleukin-5 signal transduction, in treating eosinophilic syndrome or
                                                                                                                                                                                                                                                                                                                                                                                                           a mammalian
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S 밁 Query Match Best Local (Matches 2002 CGGCCAAAAGTAAGTTACA 2021 20; 20 Similarity Conservative 0.6%; <u>.</u> Score 20; DB 1; Lo Pred. No. 1.1e+02; Mismatches 0 Length 20 Indels 0, Gaps 0

RESULT 152
ADR12034/c
ID ADR120
XX ADR120
XX ADR120
XX DF 23-SEF
XX DE Human
XX Human Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar moiety; 5-methyloytosine; IL-5 signal transduction; apoptosis; 23-SEP-2004 ADR12034 standard; DNA; 20 ADR12034; interleukin-5 (first entry) (IL-5) DNA antisense oligonucleotide ВP

syndrome; asthma; antiasthmatic;

US2004121376-A1

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RESULT 153
ADR12021/c
ID ADR120
XX
AC ADR120
XC ADR120
XX
DT 23-SE
XX
DT 23-SE
XX
XX
DE Humar
XX
                                                                                                                                                                                                                                                                                                                                                                     C. i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one conditied sugar moisty, i.e. a 2'-0-methoxyethyl sugar moiety, and at conditied sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at conditied sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at conditied nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is compound so that transduction or IL-5 or IL-5 receptor a isoforms is condition associated with condition associated with conditions of the mammal atherapeutic or condition associated with conditions of the mammal atherapeutic or prophylactic amount of an condition characterised by a reduction in apoptosis comprises compound so that IL-5 signal transduction, IL-5 or IL-5 corporated with conditions and compound so that IL-5 signal transduction, IL-5 or IL-5 corporated with conditated. The antisense compounds, methods and compositions are constituted in promoting apoptosis and in treating eosinophilic syndrome and condition. This sequence represents a human IL-5 DNA antisense
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                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
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17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -5 (IL-5) signal transduction. The antisense compound is an antisense oligonuclectide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonuclectide comprises at least one modified internucleoside linkage,
                                                     Human interleukin-5
                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 8 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound useful in promoting apo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                    23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-OCT-2003; 2003US-00679532
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                                                                                                                    ADR12021
                                                                                                                                                   ADR12021 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-479669/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MANO/)
                                                                                                                                                                                                                                                   2051 GCTGTGCCTATTTCTATGGA 2070
                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                   20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                    GCTGTGCCTATTTCTATGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO
                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               und modulating apoptosis and
                                                     (IL-5)
                                                                                                                                                                                                                                                                                                                                                                 5 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to an antisense compound that modulates interleukin sduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                  0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77pp; English.
                                                     DNA
                                                                                                                                                                                                                                                                                                  <u>,,</u>
                                                                                                                                                                                                                                                                                                                 Score 20; DB 1; Length 20; Pred. No. 1.1e+02;
                                                     antisense
                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                  1.1e+02;
thes 0;
                                                   oligonucleotide
                                                                                                                                                                                                                                                                                                   Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a mammalian
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RESULT 154
ADR12027/c
ID ADR120
XX
AC ADR120
XX

ADR12027 standard; DNA; 20

ВP

ADR12027

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857 TGAATGCTGGTGTGCTGTAA 876

Query Match Best Local (Matches

20;

Conservative

0

Mismatches

0,

Gaps

0

1.1e+02;

Length 20; Indels

Similarity

0.6%; Score 20; DB 1; 100.0%; Pred. No. 1.1e+(

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CC -5 (II-5) signal transduction. The antisense compound is an antisense conjugation in the interior in the interior in the interior conjugation of the antisense compound is an antisense conjugation of interior in the interior compound is an antisense compound in the interior in the interior compound is an antisense compound in the interior in the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; interleukin-5; il-5; 88; anciseus constitution in the sugar molety; IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar molety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome or
Sequence 20 BP; 7 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-479669/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dean NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-OCT-2003; 2003US-00679532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; SEQ ID NO 43; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Manoharan
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Human interleukin-5

(IL-5)

DNA antisense oligonucleotide

23-SEP-2004

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                                                                                                                                                  The invention relates to an antisense compound that modulates interleukin CC -5 (II-5) signal transduction. The antisense compound is an antisense coligonucleotide targeted to a nuclecic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound expression of mammalian II-5 or II-5 receptor a. The antisense condition of mammalian II-5 or II-5 receptor a. The antisense condition of mammalian II-5 receptor a in mammalian cells or CC diseast one modified nucleobase, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio CC of the isoforms of mammalian II-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC disease or condition or II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC antisense compound so that II-5 signal transduction, II-5 or II-5 or II-5 creceptor a expression of an insense compound so that II-5 receptor a is modulated, the ratio of II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a is modulated. The antisense compounds, methods and compositions are cuseful in promoting apoptosis and in treating eosinophilic syndrome and coligonucleotide of the invention.
                                                             Matches
                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful in asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IL-5 receptor a; phosphorothioate;
5-methylcytosine; IL-5 signal trans
eosinophilic syndrome; asthma; anti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dean
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DEAN/)
                               1407
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20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KARRAS J G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MANOHARAN M
                                                                                                                           20
                  TGCCTGGTCATATTAAAATG 1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Karras JG,
                                                                                                                           B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 49; 77pp; English
                                                             Conservative
                                                                                                                           7
                                                                                                                         Α;
                                                                         0.6%;
                                                                                                                           4 C; 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mckay R,
                                                           <u>,</u>
                                                                                                                           <u>ი</u>
                                                                            Score 20; DB 1; Length 20; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 transduction; apoptosis;
; antiasthmatic; cytostatic
μ
                                                                                                                           o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense oligonucleotide;
                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Manoharan
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                                                                                                                           0
                                                                                                                           Ģ,
                                                                                                                           0
                                                                                                                           Other;
                                                             Indels
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                                                           <u>,,</u>
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RESULT 155 ADR12031/c

밁 S

20

1932 GTCAAACTGTGCAAGGGGGT 1951

Query Match Best Local S Matches 20

Similarity

0.6%;

Conservative

0, Score :

Mismatches

0

Gaps

0;

. No.

1.1e+02; DB 1;

Length 20 Indels

Sequence

20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

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The invention relates to an antisense compound that modulates interleukin CC -5 (II-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CII-5 signal transduction or II-5 or II-5 receptor a expression, or a cc disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dean
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(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-OCT-2003; 2003US-00679532.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004121376-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human interleukin-5 (IL-5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR12031 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 53; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000WO-US007318
2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9905-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           oligonucleotide #15
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CC oligonuclectide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense CC oligonuclectide comprises at least one modified internucleoside linkage, CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio CC of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a in mammalian cells or tissues with an antisense is CC altered. Treating a mammal having a disease or condition associated with CI -5 signal transduction or II-5 or II-5 receptor a expression, or a condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 creceptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a matterions are compound to the mammal and the compositions are compound.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                  is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; interleukin-5; IL-5; 88; anti8en8e oligonucleotide; IL-5 receptor a; phosphorothioat6; 2'-O-methoxyethyl sugar 5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense compound modulating useful in promoting apoptosis and
   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DEAN/)
(KARR/)
(MCKA/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human interleukin-5 (IL-5) DNA antisense oligonucleotide #27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-SEP-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEAN N M.

KARRAS J G.

MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MANOHARAN M
     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Karras JG,
   B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-00280799
2000WO-US007318
2001US-00800629
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   A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĕ
                                     the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      77pp;
   σ
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   G; 9 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        interleukin-5 signal transduction, in treating eosinophilic syndrome
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   0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sugar moiety;
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Query Match Best Local S Matches 20

Similarity 20; Conserv

0.6%; Score 20; DB llarity 100.0%; Pred. No. 1.: Conservative 0; Mismatches

. 1.1e+02; ches 0; DB 1;

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Gaps

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Length 20; Indels

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RESULT 157
ADR12039/c
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                                                CC II-5 or II-5 receptor a, where the antisense compound modulates the control of the control of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -5 (II-5) signal transduction. The antisense compound is an oligonucleotide targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-OCT-2003; 2003US-00679532.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5-methylcytosine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADR12039 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dean NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004121376-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; interleukin-5; IL-5; 88; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human interleukin-5 (IL-5) DNA antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADR12039;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-JUN-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAAAGGCAAACGCAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAAAGGCAAACGCAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00280799.
2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     syndrome;
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ine; IL-5 signal tran
                                            of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      542
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Manoharan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sugar moiety;
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Query Match Best Local S Matches 20

l Similarity 20; Conserv

0.6%; ilarity 100.0%; Conservative (

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Mismatches

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Gaps

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Score 20; Pred. No.

DB 1; Le 1.1e+02;

Length 20 Indels

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RESULT 158
ADR12042/c
ID 123-SEP
XX Human;
XX Human;
XX Human;
XX Human;
XX Human;
XX Homo ©
YX 2004
XX 2004
XX 2004
XX 2004
XX 26-Mal
PD 24-JUN
XX 26-Mal
PR 17-Mal
PR 17-Mal
PR 07-Mal
XX (MCAR,
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17-MAR-2000;
07-MAR-2001;
                                                                              i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar molety, i.e. a 2'.-C-methoxyethyl sugar molety, and at least one modified nucleobase, i.e. 5-methyloytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with II-5 signal transduction or II-5 or II-5 receptor a expression, or a disease or condition characterised by a reduction in appotosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 receptor a expression or II-5 or II-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                  IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage,
                                                                                                                                                                                                                                                                                                                                                                            -5 (IL-5) signal transduction. The antisense compound is an a oligonucleotide targeted to a nucleic acid molecule encoding IL-5 or IL-5 receptor a, where the antisense compound modulates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; interleukin-5; IL-5; 88; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'.O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                    receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are
                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-479669/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (KARR/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-JUN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADR12042 standard; DNA; 20
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MCKAY F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCAGTGAGAATGAGGGCCA 2288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ense compound modulating promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; 99US-00280799.
; 2000WO-US007318.
; 2001US-00800629.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                             to an antisense compound that modulates sduction. The antisense compound is an an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              77pp; English
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treating eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                               antisense
                                                                                                                                                                                                                                                                                                                                                                                                        a mammalian
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RESULT 159
ADR12041/C
ID ADR120
XX ADR120
XX ADR120
XX ADR120
XX Human
XX Human
XX Human
XX US200
XX US200
XX 24-JU
XX 26-MA
PR 17-MA
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                       cc oligonucleotide targeted to a nucleic acid molecule encoding a mammalian colligonucleotide targeted to a nucleic acid molecule encoding a mammalian colligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar molety, i.e. a 2'-O-methoxyethyl sugar molety, and at compound so the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues comprises contacting the mammalian II-5 receptor a in mammalian cells or compound so that the ratio of the mammalian transduction or II-5 with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with collegase or condition characterised by a reduction in apoptosis comprises administering to the mammal at the rapeutic or prophylactic amount of an entire contaction as the transduction or the mammal transputcion or transduction and the contaction of the mammal accordance to the mammal at the contaction of the mammal accordance to the mammal accorda
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DEAN/)
(KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound useful in promoting apo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-OCT-2003; 2003US-00679532.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MANO/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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antisense compound so that IL-5 signal

receptor a expression, or IL-5 receptor a is modulated, receptor a isoforms is altered, or expression of membrar is modulated. The antisense compounds, methods and compo

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The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar molety, i.e. a 2'-O-methoxyethyl sugar moiety, and at least one modified sugar molety, i.e. a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
5-methylcytosine; IL-5 signal transduction; apoptosis;
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(KARR/)
(MCKA/)
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2000WO-US007318.
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17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                    Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or IL-5
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The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2-O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio

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New antisense compound useful in promoting apo

apoptosis

d modulating poptosis and

interleukin-5 signal transduction, in treating eosinophilic syndrome

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WPI; 2004-479669/45

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RESULT 162
ADR12044/c
ID ADR12044 standard; DNA;
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                                  26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome asthma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; interleukin-5; IL-5; 88; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'.O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                              New antisense compound useful in promoting apo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human interleukin-5 (IL-5) DNA antisense oligonucleotide #28
                                                                                       Example
                                                                                                                                                                                                                                         (MANO/)
                                                                                                                                                                                                                                                       (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                            24-JUN-2004
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                                                                                                                                                                                                           Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.6%;
ilarity 100.0%;
Conservative
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                                                                                     SEQ
                                                                                                                                                                                                                                                                                                                   99US-00280799.
2000WO-US007318.
2001US-00800629.
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                                                                                       ID NO
                                                                                                                                und modulating apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
                                                                                     66;
                                                                                                                                                                                                            Mckay
                                                                                     77pp; English
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                                                                                                                                                                                                           ₽,
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Pred. No.
                                                                                                                                                                                                            Manoharan
                                                                                                                                interleukin-5 signal transduction, in treating eosinophilic syndrome
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The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the

of mammalian IL-5 or IL-5

The invention relates to an antisense compound that modulates interleukin

Example 20; SEQ

ID NO

69;

77pp; English.

New antisense compound modulating useful in promoting apoptosis and

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RESULT 163
ADR1200
XX
ADR1200
XX
ADR1200
XX
ADR1200
XX
ADR1200
XX
ADR1200
XX
Human;
KW
IL-5 r
KW
FOR Homo s
XX
US2004
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C6-WAR
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17-MAR
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                   (DEAN/)
(KARR/)
(MCKA/)
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17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-OCT-2003; 2003US-00679532.
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                                                                                                                                                                                                                                                                                              Dean NM,
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KARRAS J G.
MCKAY R.
MANOHARAN M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (IL-5) DNA antisense oligonucleotide #31
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                                                                                                                                                                                                                                                                                              Mckay R,
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Pred. No.
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                                                                                                                                                                                                                                                                                              Manoharan
                                                                                                                                           interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
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Example

20; SEQ ID NO 70; 77pp; English

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RESULT 164
ADR12048/c
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Best Local Similarity
Matches 20; Conserv
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17-MAR-2000; 2000WO-US007318.
07-MAR-2001; 2001US-00800629.
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eosinophilic synd:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'.-0-methoxyethyl sugar
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                                                                                                                       Dean NM,
                                                                                                                                                                                 (DEAN/)
(KARR/)
(MCKA/)
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                                                                                                                                                         DEAN N M.
KARRAS J G.
MCKAY R.
MANOHARAN M.
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                                                                                                               Karras JG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 C;
                                                                                                                   Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               signal transduction; apoptosis;
asthma; antiasthmatic; cytostat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 G; 5 T; 0 U;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                     Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
. 1.1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sugar moiety;
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New antisense compound modulating useful in promoting apoptosis and asthma.

interleukin-5 signal transduction, in treating eosinophilic syndrome

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WPI; 2004-479669/45

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RESULT 165
ADR12017/C
ID ADR120
XX ADR120
XX ADR120
XX ADR120
XX Human;
XW IL-5 r
XW S-meth
XW S-meth
XW COS Homo B
XX US2004
XX US2004
XX 24-JUN
XX 24-JUN
XX 26-MAR
PR 17-MAR
PR (MARR/
PA (MARR/

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Best Local Sim
Matches 20;
                                                                                                                                                      (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
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17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
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       WPI; 2004-479669/45
                                                                               Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-SEP-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human interleukin-5 (IL-5) DNA antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADR12017 standard;
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                                                                           Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                 2000WO-US007318
2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                             9905-00280799
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.6%;
                                                                               Mckay
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Pred. No.
                                                                                   Manoharan
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or

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RESULT 166
ADR12024/c
ID ADR120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 20
                                                                              26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                         IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -5 (IL-5) signal transduction. The antisense compound is an antisense
oligonucleotide targeted to a nucleic acid molecule encoding a mammal
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                                                                                                                                                                                                              US2004121376-A1.
                                                                                                                                                                                                                                              Нопо
                                                                                                                                                                                                                                                                                                                                                             Human interleukin-5 (IL-5) DNA antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADR12024 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                            Human; interleukin-5; IL-5; 88; antisense oligonucleotide;
(DEAN/)
(KARR/)
(MCKA/)
(MANO/)
                                                                                                                                                                               24-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                             23-SEP-2004 (first entry)
                                                                                                                                             06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
                                                                                                                                                                                                                                            sapiens
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MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                              99US-00280799
2000WO-US007318
2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        39; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Le
1.1e+02;
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The invention relates to an antisense compound that modulates interleukin CC -5 (II-5) signal transduction. The antisense compound is an antisense coligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense coligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylytosine. Altering the ratio CC of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CII-5 signal transduction or II-5 or II-5 receptor a expression, or a captisense compound so that II-5 signal transduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or receptor a expression, or a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dean NM,
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S 밁 Query Match Best Local S Matches 20 928 ACATAAAAATGTAAGTTAAA 947 20 20; Similarity ACATAAAAATGTAAGTTAAA 1 Conservative 100.0%; I tive 0; 0.6%; Score 20; DB 1; L Pred. No. 1.1e+02; 0; Mismatches 0; 0 Length 20; Indels <u>.</u> Gaps 0

Sequence 20

BP; 5

A; 2 C; 1 G; 12

T; 0

u; o

Other,

RESULT 167 ADR12026; ADR12026 standard; DNA; 20 ВP

Human interleukin-5 (IL-5) DNA antisense oligonucleotide #10

23-SEP-2004

(first entry)

26-MAR-1999; 17-MAR-2000; 07-MAR-2001; 06-OCT-2003; US2004121376-A1 sapiens. 99US-00280799. 2000WO-US007318. 2001US-00800629. 2003US-00679532.

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oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or cissues comprises contacting the cells or tissues with an antisense CC altered. Treating a mammal having a disease or condition associated with II-5 signal transduction or II-5 or II-5 receptor a isoforms is altered by a reduction in approprise comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 ceceptor a isoforms is altered, or expression of membrane II-5 or II-5 ceceptor a isoforms is altered, or expression of membrane II-5 or II-5 ceceptor a isoforms is altered, or expression of membrane II-5 or II-5 ceceptor a isoforms is altered, or expression of membrane II-5 receptor a is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and coligonucleotide of the invention.
ADR12028/c
ID ADR120
XX ADR120
AC ADR120
AC ADR120
DT 23-SEP
XX Human;
KW Human;
KW 5-meth
KW 6-meth
KW eosinc
XX US2004
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Best Local S
Matches 20
                                                                                                                                                            Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar 5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                       ADR12028 standard; DNA; 20
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                     06-OCT-2003; 2003US-00679532
                                                    24-JUN-2004
                                                                                US2004121376-A1
                                                                                                                Homo sapiens
                                                                                                                                                 eosinophilic syndrome; asthma;
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(KARR/)
(MCKA/)
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                                                                                                                                                                                                                         interleukin-5 (IL-5) DNA antisense oligonucleotide #12
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                                                                                                                                                                                                                                                          (first entry)
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Pred. No. 1.1e+02;
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                                                                                                                                                 antiasthmatic;
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                                                                                                                                                                         sugar moiety;
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CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar molety, i.e. a 2'-O-methoxyethyl sugar molety, and at cleast one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or clisuses comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with coll-5 signal transduction or IL-5 or IL-5 receptor a expression, or a condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an artisense compound so that IL-5 signal transduction, IL-5 or IL-5 creceptor a isoforms is altered, or expression of membrane IL-5 receptor a isodulated. The antisense compounds, methods and compositions are cuseful in promoting apoptosis and in treating eosinophilic syndrome and continuation of the invention.

CC oligonucleotide of the invention.
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17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                            -5 (II-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian II-5 or II-5 receptor a, where the antisense compound modulates the expression of mammalian II-5 or II-5 receptor a. The antisense conjugates at least one modified internucleoside linkage, oligonucleotide comprises at least one modified internucleoside linkage,
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(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an antisense compound that modulates interleukin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example
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KARRAS J
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20; SEQ ID NO
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; 2000WO-US007318.
; 2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    50; 77pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interleukin-5 signal transduction, in treating eosinophilic syndrome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              syndrome or
                                                                                                                                                                                                                                                                                                                                                                                                                            a mammalian
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Best Matches Query Match Local l Similarity 100 20; Conservative 0.6%; SUU 100.0%; PY Score Pred. Mismatches . 20; DB 1; 1.1e+02; Length 20 Indels

0

Gaps

0

Sequence

20

BP; 8

A; 7 C; 2

G; 3 T; 0 U; 0 Other;

밁 1627 TGGTGGTTTGTTGCCTAGAA 1646 20 regregarie Trecciacaa 1

ADRIZO38/C
ID ADRIZO
AC ADRIZO
AC ADRIZO
XX
ADRIZO
XX
ADRIZO
XX
DT 23-SEP
XX
Human;
XX
Human;
XW
IL-5 r
KW 5-meth
KW 6-meth
XW
SS Homo 8
XX
PN USZ004
XX ADR12038; ADR12038 standard; 23-SEP-2004 (first entry) DNA, 20 ВP

Human interleukin-5 (IL-5) DNA antisense oligonucleotide #22

IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; Human; interleukin-5; IL-5; 88; antisense oligonucleotide; eosinophilic syndrome;

Homo sapiens

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1 2

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ARESULT 170
ADR12035/c
ID ADR120
XX
AC ADR120
XX
AC ADR120
XX
THUMAN
XX
DE Human
XX
KW Human;
KW Human;
KW Human;
KW Human;
KW Human;
XX
KW Human;
XX
KW G-meth
XX
eosinc
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                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC IL-5 or IL-5 receptor a, where the antiense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an CC creceptor a expression, or IL-5 signal transduction, IL-5 or IL-5 or IL-5 or creceptor a expression, or IL-5 signal transduction, IL-5 or IL-5 or creceptor a expression, or IL-5 signal transduction, IL-5 or IL-5 or creceptor a expression, or IL-5 seceptor a signal transduction of IL-5 or creceptor a stoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are CC useful in promoting apoptosis and in treating eosinophilic syndrome and CC oligonucleotide of the inversions
                                                                                                                                                                                                                                                                                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -5 (11-5) signal transduction. The antisense compound is an a coligonucleotide targeted to a nucleic acid molecule encoding IL-5 or IL-5 receptor a, where the antisense common and the coligonucleotide is a coligonucleotide.
                                 Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar 5-methylcyrosine; IL-5 signal transduction; apoptosis;
                                                                                                                 Human interleukin-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 4 A; 8 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 20; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-479669/45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (DEAN/)
(KARR/)
(MCKA/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-OCT-2003;
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                     eosinophilic
                                                                                                                                                       23-SEP-2004
                                                                                                                                                                                          ADR12035
                                                                                                                                                                                                                            ADR12035 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention relates to an antisense compound that modulates interleukin (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                              2241 AAGATTTTTGGAGGAGAAGGA 2260
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                                                                                                                                                                                                                                                                                                                                                                                                     20;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                          AAGATTTTGGAGGAGAAGGA 1
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                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-00280799.
2000WO-US007318.
2001US-00800629.
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                   syndrome; asthma; antiasthmatic;
                                                                                                                                                   (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of the invention.
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                                                                                                               (IL-5) DNA antisense oligonucleotide
                                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
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                                                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                     Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 20;
1.le+02;
hes 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                 0;
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The invention relates to an antisense compound that modulates interleukin CC -5 (II-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or cissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC II-5 signal transduction or II-5 or II-5 receptor a expression, or a compound so that II-5 signal transduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 creceptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, and in treating cosinophilic syndrome and collisions are compounds, methods and compositions are
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17-MAR-2000;
07-MAR-2001;
                     useful in promoting approved a human asthma. This sequence represents a human or identical entities of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 20; SEQ ID NO 57; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-479669/45.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
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2001US-00800629.
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Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Matches Query Match Local Similarity 20; Conservative 100.0%; 0.6%; <u>.</u> Score 20; pred. No. Mismatches DB 1; 1.1e+02; Length 20 Indels <u>.</u> Gaps

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              Ś
              2108 TTTTTCACAGAAAAGTGTG 2127
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RESULT 171
ADR12036/c
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                       23-SEP-2004
                                  ADR12036;
                                              ADR12036 standard;
                       (first entry)
                                              DNA:
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Human interleukin-5 (IL-5) DNA antisense oligonucleotide #20

Human; interleukin-5; IL-5; ss; antisense oligonucleotide;

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RESULT 172
ADR12023/c
ID ADR12023
ADR12023/
ID ADR1
XX
AC ADR1
XX
DT 23-8
                                                                                                                                                                                                                                                                                                                                      CC -5 (II-5) signal transduction. The antisense compound is an antisense compound modulates the compound is an antisense compound modulates the compound is an antisense conformation in the antisense conformation is a 2'-0-methoxyethyl sugar moiety, and at compound modified mucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with compound so that the ratio of the mammalian II-5 receptor a isoforms is conformed in the antisense compound so that iI-5 or II-5 receptor a expression, or a condition associated with considering to the mammal and the raceptor a expression, or a condition characterised by a reduction, in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 cor II-5 receptor a is modulated, the ratio of II-5 is modulated. The antisense compounds, methods and compositions are constant as altered, or expression of membrane II-5 receptor a standard compositions are constant and in treating eosinophilic syndrome and conjouncleotide of the invention.
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                              Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dean
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17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
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(KARR/)
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                                                                                                                                                                                      2135 AAGACGGAGAGTAAACCAAT 2154
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KARRAS
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                                                                                                                                                                                                                                                                                                              BP; 2
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С
                                                                                                                                                                                                    0.6%; 5--
/ 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                           A; 5 C; 3 G; 10 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Manoharan
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23-SEP-2004 ADR12023;

(first

entry)

RESULT 173 ADR12045/c ID ADR12045

standard;

DNA;

20

ВP

0

standard;

20 BP

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                                                                                                                                                                             The invention relates to an antisense compound that modulates interleukin CC -5 (IL-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CC adisease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or IL-5 creceptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, and in treating eosinophilic syndrome and collisions are compounded, methods and compositions are collisions are compounded to the invention.
                                                               Query Match
Best Local S
Matches 20
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17-MAR-2000;
07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl : 5-methylcytosine; IL-5 signal transduction; apoptosis eosinophilic syndrome; asthma; antiasthmatic; cytostat
                                                                                                                                   Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 20;
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                                                                                                                                                                    oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-479669/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dean NM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-OCT-2003; 2003US-00679532.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MANO/)
                   905 ACTCTGAGGATTCCTGTTCC
20
                                                                 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KARRAS J G.
MCKAY R.
MANOHARAN M.
                                                                                   Similarity
ACTCTGAGGATTCCTGTTCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ
                                                                                                                                    BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                 Conservative
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2000WO-US007318.
2001US-00800629.
                                                                                                                                                                      of the invention.
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                                                                                 0.6%;
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                                                               0,
                                                                                   Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Manoharan
                                                                   Mismatches
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                                                                                                   DB 1;
                                                                                   1.1e+02;
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                                                                 Indels
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                                                                 Gaps
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                                                                                                          Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methyloytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with II-5 signal transduction or II-5 or II-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammaliar IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense compound compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, the state of the s
                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                              useful in promo-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 20; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-479669/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-OCT-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2004121376-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eosinophilic syndrome; asthma; antiasthmatic; cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; interleukin-5; IL-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human interleukin-5 (IL-5) DNA antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR12045;
                                                                                                                                                                                                                                                                           oligonucleotide
                                                                                                                                                                                                                                                                                            is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DEAN/)
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) KARRAS J G.
) MCKAY R.
                                                                                                                                          Similarity
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                                                                                                                                                                                                                       20
TCCTCTCCAGACTCTGAGGA 1
                                              TCCTCTCCAGACTCTGAGGA 914
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                                                                                                                                                                                                                    BP; 5
                                                                                                             Conservative
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2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                           of the invention.
                                                                                                                                                                                                                    A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                    0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88;
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                                                                                                          Score 20; DB 1; L
Pred. No. 1.1e+02;
0; Mismatches 0;
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                                                                                                                                                                 Length 20;
                                                                                                             Indels
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RESULT 174
ADRIZ049/C.d.y.d
ID: ADRIZ049;
XX
AC ADRIZ049;
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TILL S received the seriophic s
The invention relates to an antisense compound that modulates interleukin CC -5 (IL-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one CC modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5 methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5 creeptor a expression, or IL-5 or IL-5 signal transduction, IL-5 or IL-5 creeptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms are
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5-methylcytosine; IL-5 signal trans
eosinophilic syndrome; asthma; anti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAR-2000;
07-MAR-2001;
                                                            is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-OCT-2003; 2003US-00679532.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human interleukin-5 (IL-5)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 20; SEQ ID NO 71; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KARR/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2004-479669/45.
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KARRAS J G.
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00280799.
2000WO-US007318.
2001US-00800629.
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Best Local Similarity

100.0%;

Score 20; Pred. No.

DB 1;). 1.1e+02

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Query Match

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17-MAR-2000; 2000WO-US007318.
07-MAR-2001; 2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human interleukin-5 (IL-5) DNA antisense oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2004-479669/45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTTCACAGAAAAAGTGTG
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New antisense compound Ħ promoting und modulating apoptosis and interleukin-5 signal transduction, in treating eosinophilic syndrome or

Example 20; SEQ ID NO 40; 77pp; English.

CC -5 (II-5) signal transduction. The antisense compound is an antisense coligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound coule the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at least one cC i.e. senethyloytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal at therapeutic or prophylactic amount of an CC antisense compound so that II-5 seceptor a is modulated, the ratio of II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a mathian II-5 receptor a sexpression of II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a mathian II-5 receptor a mathian and commonstitions are those second to mathian and commonstitions are the compound to the mathian and commonstition of III-5 receptor a mathian II-5 receptor a mathian III-5 recepto oligonucleotide The invention relates to an modulated. The antisense compounds, methods and compositions are stul in promoting apoptosis and in treating eosinophilic syndrome and thus. This sequence represents a human IL-5 DNA antisense invention. antisense compound that modulates interleukin

Sequence 20 BP; 0 **A**, Ç σ <u>ი</u> 9 Ţ, 0 Ģ 0

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ADR12022/
ADR1202/

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CC oligonuclectide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense CC oligonuclectide comprises at least one modified internucleoside linkage, CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. 3'-0-methoxyethyl sugar moiety, and at cC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio CC of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition sesociated with CC II-5 signal transduction of II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an CC antisense compounds of that II-5 signal transduction, II-5 or II-5 or II-5 or CC receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a septor a isoforms is altered, or expression of membrane II-5 receptor a septor a isoforms is altered, or expression of membrane II-5 receptor a septor a isoforms is altered, or expression of membrane II-5 receptor a septor a isoforms is altered, or expression of membrane II-5 receptor a septor a septo
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Best Local S
Matches 20
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17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-OCT-2003; 2003US-00679532
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MCKAY R.
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100.0%; Pred. No.
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RESULT 177
ADR12030/c
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          CC -5 (II-5) signal transduction. The antisense compound is an antisense coligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 receptor a, where the antisense compound modulates the Expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense coligonucleotide comprises at least one modified internucleoside linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio CC of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CI-5 signal transduction or II-5 or II-5 receptor a expression, or a CC contisted of the mammal a therapeutic or prophylactic amount of an contistering to the mammal a therapeutic prophylactic amount of an contistering to the II-5 signal transduction. II-5 or II-5 or
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Best Local (
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17-MAR-2000;
07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DEAN/)
(KARR/)
(MCKA/)
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5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human interleukin-5 (IL-5)
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receptor a expression,
                                                                                                                                                                                                                                                                                                                               invention relates to an antisense compound that modulates interleukin (IL-5) signal transduction. The antisense compound is an antisense
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) KARRAS J G.
) MCKAY R.
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ilarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID
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2000WO-US007318.
2001US-00800629.
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or IL-5 receptor a
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. 1.1e+02;
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modulated,
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ratio of IL-5
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RESULT 178
ADRI2032/c
ID ADRI2032;
XX
Human interleukin-5 (IL-5) DN
XX
Human; interleukin-5; IL-5; signal
XX
IL-5 receptor a; phosphorothi
5-methylcycosine; IL-5 signal
XX
ADRI2036-A1.
ADRI203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
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Best Local S
Matches 20
The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a physical properties at least one modified sugar molety, i.e. a 2'-O-methoxytethyl sugar molety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1884
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-00280799.
2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
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Pred.
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Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         interleukin-5 signal transduction, in treating eosinophilic syndrome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,,</u>
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RESULT 179
ADR12046;
ID ADR12046;
XX ADR12046;
XX ADR12046;
XX ADR12046;
XX ADR12046;
XX ADR12046;
XX Human interleukin-5
XX Human; interleukin-5
XX Human; interleukin-5
XX Human; interleukin-5
XX Human; interleukin-5
XX US2004121376-A1.
XX US2004121376-A1.
XX US2004121376-A1.
XX US2004121376-A1.
XX O6-OCT-2003; 2003US-
XX US2004121376-A1.
XX PF 06-OCT-2003; 2003US-
XX US2004121376-A1.
XX D6-MAR-1999; 99US-
PF 07-MAR-2000; 2000WO-
PR 17-MAR-2000; 2000WO-
PR 07-MAR-2001; 2001US-
XX US2004-479669/45.
XX WPI; 2004-479669/45.
XX New antisense compove useful in promoting XX
PA (MCXA/) MCXAY R.
PA (MCXA/) MCXAY R.
PA (MANO/) MANOHARAN M.
XX New antisense compove useful in promoting YX
PS Example 20; SEQ ID N
XX New antisense compove of The invention relate CC C The invention of mammal CC C The invention of mammal CC C Sypression of mammal CC C C Sypression of mammal CC C C Sypression of mammal CC C IL-5 or IL-5 receptic compounciated a sugar moited CC confidence one modified compounciated in the isoforms of n
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Best Local S
Matches 20
5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 receptor a expression, or II-5 receptor a is modulated, the ratio of II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating essinophilic syndrome and asthma. This sequence represents a human II-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; interleukin-5; IL-5; ss; antisense IL-5 receptor a; phosphorothioate; 2'-O-mu 5-methylcytosine; IL-5 signal transduction
                                                                                                                                                                                                                                                                                                                            New antisense compound
                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-479669/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            eosinophilic syndrome; asthma; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence . 20
                                                                                                                                                                                               The invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-OCT-2003; 2003US-00679532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCKAY R.
MANOHARAN M.
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                                                                                                                                                                                                                                                                                                      promoting
                                                                                                                                                                                                                                                                                                                                                                                                               Karras JG,
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2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                    und modulating apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
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                                                                                                                                                                                               to an antisense compound
                                                                                                                                                                                                                                          68;
                                                                                                                                                                                                                                                                                                                                                                                                                 Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              borothicate; 2'-O-methoxyethyl s
signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                     77pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA antisense
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 20;
Pred. No.
                                                                                                                                                                                                                                        English.
                                                                                                                                                                                                                                                                                                                                                                                                               Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                    interleukin-5 signal transduction, in treating eosinophilic syndrome
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                                                                                                                                                                                               that
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                                                                                                                                                                                             modulates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sugar moiety;
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                                                                                                                                                                                               interleukin
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Query Match Best Local S Matches 21

Similarity

0.6%;

Score 19.8; D Pred. No. 1.3e 0; Mismatches

.3e+02 B 0 Other;

1;

Length 24;

Indels

0

Gaps

0

Conservative

0

Sequence 24

BP; 2

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.. 0 u, invention

The present invention relates to phytochrome 10 and its coding sequence (see AN48097 and AN64233). The phytochrome and its coding sequence are useful in the diagnosis and treatment of malignant tumour, haemopathy, HIV infection, immunological diseases and various inflammations. The present sequence is a PCR primer, which was used in an example from the

Phytochrome 10 and encoded polynucleotide, applicable in treatment of malignant tumor, hemopathy, HIV infection, i diseases and various inflammation.

immunological

WPI; 2001-418238/44.

Mao Y,

Example 3; Page 16; 36pp; Chinese.

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RESULT 180
ANH48099/c
ID ANH480
XX ANH480
XX Phytoc
XX W02001
XX Unider
XX Unider
XX W25-DE(
XX W25-DE(
XX W27-DE(
XX W27-DE(
XX W27-DE(
XX W27-DE(
XX W27-DE(
XX W21;
XX W21;
XX Phytoc
PT Chiseat
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with II-5 signal transduction or II-5 or II-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 receptor a expression, or II-5 receptor a expression, or II-5 receptor a is modulated, the ratio of II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human II-5 DNA antisense
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Phytochrome 10; cytostatic; anti-HIV; haemopathic; immunomodulatory; malignant tumour; haemopathy; HIV infection; immunological disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                        The invention relates to a system for detecting gene expression, which comprises one or two isolated DNA molecules that detect expression of a gene, where the gene corresponds to any of 8143 oligonucleotides (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful for leukocyte expression profiling. It is particularly useful for diagnosing a disease, monitoring (rate of) progression of a disease, predicting therapeutic outcome, determining prognosis for a patient, predicting disease complications in an individual or monitoring response to treatment in an individual. The diseases include cardiac allograft rejection, kidney allograft rejection, liver allograft rejection, atherosclerosis, congestive heart failure, systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis or cytomegalovirus infertica
                                                                                                                                                                                                                                                                                                   Claim 1;
                                                                                                                                                                                                                                                                                                                          New system for leukocyte expression profiling, diagnosing a disease, or monitoring (the rate of) progression of a disease, e.g. atherosclerosis or congestive heart failure, comprises diagnostic oligonucleotides.
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08-JUN-2001;
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            TTTCAGGCATACTGACACTTTGCCAGAAAGCATAAAATTC
                                                                                                                                                                                                                                                                                                   Page 445;
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2001US-0296764P
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                                                                                                  A; 9 C; 11 G; 11 T; 0 U; 0 Other;
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RESULT 182 ABZ02014/c ID ABZ020 XX

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standard;

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human; ss; autoimmune; chronic inflammatory disease; SLE; systemic lupus erythematosis; rheumatoid arthritis; cholecystitis; Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondylitis; ulcerative colitis; primary sclerosing cholangitis; appendicitis;

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ADG33606 standard;

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26-FEB-2004

(first entry)

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RESULT 183
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 50
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08-JUN-2001; 2001US-0296764P.
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Quertermous
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AAT76223 standard; DNA; 19
                    06-JUN-1996;
                                                                                                                Synthetic
                                                                                                                                               Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
                                                                                                                                                                                               Human IL5
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                                                    19-DEC-1996.
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                                                                                                                                                                                                                                                                                                                                                                                                 2345 TTTCAGGCATACTGACACTTTGCCAGAAAGCATAAAATTC
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                                                                                                                                                                                                                                                                                                                                                                             47
                                                                                                                                                                                                                                                                                                                                                                             TTTCTGGCAAAGTGTCAGTATGCCTGAAATATTTACTTTC
                                                                                                                                                                                               antisense oligonucleotide HUMIL5AS4.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fry K,
                    96WO-US009306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primary biliary sclerosis; probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Woodward R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   877pp; English.
                                                                                                                                                                                                                                                                                              ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                          ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 19.2; DB
Pred. No. 1.8e+
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ly N;
                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 9
.8e+02;
.es 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                           2384
                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of one
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Query Match
Best Local S
Matches 19
                                                                                                                                                                                                                                                               A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMILISAS4 specific for the human ILS. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary diseases, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-
                                                                                                                                                                                               Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 5; Page 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treatment of airway diseases such as asthma adenosine-free antisense oligo:nucleotide to
                                                                                                                                                                                                                                                 reactive airways
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-051871/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Мусе Ј₩,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JUN-1995;
                                               2127
19
                                                                                                 19;
                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UNIV EAST CAROLINA.
                               GGAGAAGAAGACGGAGAG 2145
GGAGAAGAAGACGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Metzger WJ/
                                                                                            0.6%; So ilarity 100.0%; I conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     English.
                                                                                            Score 19; DB 1; L
Pred. No. 1.2e+02;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ő

    by topically applying
airway epithelium of

                                                                                                 0
                                                                                                                                                Length 19;
                                                                                                 Indels
                                                                                              <u>.</u>
                                                                                                 Gaps
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RESULT 185 AAX54019/c ID AAX540 XX AAX54019; AAX54019 standard; DNA;

0

밁 S

Human IL-5 antisense oligonucleotide fragment.

(firet

Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis prostate cancer; 88. cancer; melanoma; hepatic metastasis;

Synthetic.

25-MAR-1999 WO9913886-A1

17-SEP-1998; 98WO-US019419

17-SEP-1997; 09-JUN-1998; 97US-0059160P. 98US-00093972.

(UYEC-) UNIV EAST CAROLINA

Мусе JW;

WPI; 1999-229400/19

antisense oligonucleotides used in treatment of, e.g. pulmonary

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RESULT 186
AAA33463/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rihinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary diseases (COPD), and cancers such as leukenias, lymphomas, carcinomas e colon cancer, breast cancer, lung cancer, pancreatic cancer, bepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, well as all types of cancers which may metastasize or have metastasize
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; infilammation; allergy; allergic disease; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthmating disease; ischaemic condition; pulmonary vasoconstriction; asthm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          non-coding regions of RNAs corresponding to target genes, gene initiation codons, genemic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences ANX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA33463 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 49; 120pp; English
WPI; 2000-205971/18
                                                                                                                                                                                                                                                                                                                                                                                     WO200009525-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer; leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Low adenosine antisense oligonucleotide SEQ ID NO:1152.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         directed against at
                                                                                                                                                                                                                                                      03-AUG-1999;
                                                                                                                                                                                                                                                                                                                      24-FEB-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pulmonary hypertension; chronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; C
                                                                                                                              (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGAAGAAGACGGAGAG 2145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                              EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               including breast and prostate cancer
                                                                                                                                                                                          98US-0095212P
                                                                                                                                                                                                                                                          99WO-US017712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
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; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.2e+02;
hes 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vasoconstriction; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       metastasized
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COPD
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The present invention describes a new composition comprising an antisense coligonuclectide (ON) with low adenosine (up to 15%), which targets cure nucleic acids involved in bronchoconstriction, allergies, and/or continuation. The ON can have antiinflammatory, antiallergie, and/or cure useful for the treatment of diseases associated with inflammation. CC impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, cimpded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONS reduces side effects. The A-containing ONS break down with the reluction and inflammation. AAA32313 to AAA35312 represent the mucleotide sequences given in the sequence listing from the present the previously named sequences. SEQ ID NO:1 to 2815, and then the last 185 sequences given in the disclosure of the present invention on N.B. Sequences given in the disclosure of the present invention do not match to with their corresponding SEQ ID NO:1 to 1890 (AAA32323 to AAA32313 to AAA3231 to AAA32313 to AAA3231 to AAA32313 to AAA3231 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 18; Page 409; 1343pp; English.
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Query Match
Best Local Similarity
Matches 19; Conserv Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other; 0.6%; ; Score 19; DB %; Pred. No. 1.2 0; Mismatches DB 1; Length 19;

밁 Ş 2127 19 GGAGAAGAAAGACGGAGAG 2145

ilarity 100.0%; Conservative (

1.2e+02;

Indels

<u>.</u>.

Gaps

0

RESULT 187 AAF19585/c AAF19585 AAF19585 standard; DNA; 19 BP.

Human IL5 14-MAR-2001

polynucleotide fragment #1152.

(first entry)

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; 88.

WO200062736-A2

Homo

sapiens.

PF PD OS XXX 26-OCT-2000

24-MAR-2000; 2000WO-US008020

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RESULT 188
ABZ95279/c
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC immunosuppressive, antiastimatic, hypotensive and cytostatic activities.

CC The antisense oligonucleotides and (I) can be used to down-regulate the cexpression and or activity of target polypeptides associated with CC lung/respiratory disorders and malignancies, such as stimulating and CC activating peptide factors and transmitters, transcription factors, crownonglobulins and antibodies, antibody receptors, cytokines and CC immunoglobulins and antibodies, antibody receptors, cytokines and CC chemokines, endogenously produced specific and non-specific enzymes, CC binding proteins, adenosine receptors, bradykinin receptors, cytokine and CC receptors, CNS and peripheral nervous and non-nervous system (CNS) and peripheral nervous and non-nervous system peptide CC transmitters, defensins, growth factors, vasoactive peptides and creceptors, binding proteins and malignancy associated proteins. The CC antisense oligonuclectides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or condition selected from pulmonary vasoconstriction, inflammation, condition selected from pulmonary vasoconstriction, inflammation, pulmonary conservation, emphysema, chronic obstructive pulmonary disease (OPD), condition, emphysema, chronic obstructive pulmonary disease (OPD), condition and antisense of the proteins and antisense of the proteins of the proteins and antisense of the proteins of the proteins and antisense of the proteins of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 19
            Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; antisense gene therapy; respiratory; lung; adenosine sensitivity; antisense gene therapy; respiratory; bronchoconstriction; lung allergy; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19
                                                                                                                                                                       Human
                                                                                                                                                                                                                       17-OCT-2003
                                                                                                                                                                                                                                                                                                                       ABZ95279 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes low adenosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 14; Page 208; 1592pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-679539/66
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fragments and antisense oligonucleotides used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (NYCE/) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              can have respiratory,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2127 GGAGAAGAAGACGGAGAG 2145
                                                                                                                                                                       IL-S
                                                                                                                                                                                                                                                                                                                                                                                                                                             19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGAAGAAAGACGGAGAG 1
                                                                                                                                                                       antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EAST CAROLINA
J W.
                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                    fragment no.1143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                bronchodilator, antiinflammatory, analgesic,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 19; DB 1;
Pred. No. 1.2e+C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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RESULT 189 ABD19253/c

ABD19253 standard; DNA;

19 ₽₽ á

2127 GGAGAAGAAGACGGAGAG 2145

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19

GGAGAAGAAGACGGAGAG

ILS

29-JUL-2004

(first entry) fragment

ABD19253;

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

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junctions of genes encoding a polypeptide associated with lung and/or casal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antialtergic, antiasthmatic, hypotensive, has antiinflammatory, antialtergic, antiasthmatic, hypotensive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung surfactant in a subject's tissue, or respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
  Best Loc
Matches
                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nyce JW,
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonuclection antisense to the initiation codon, coding region, 5 or 3 end genomic flanking regions, 5 and 3 intron-exon junctions, or regions within 2-10 nucleotides of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                          Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-APR-2002; 2002WO-US013135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ubiquinone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (EPIG-)
                    Local
                                                                                                                ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ä
  19;
                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li Y,
Tang
                                                                            BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ID NO 10521; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sandrasagra A,
L, Shahabuddin
                  100.0%;
                                      0.6%;
  <u>,,</u>
                                      Score 19;
                      Pred. No.
Mismatches
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S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       μ
                                        DB 1;
                    1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pabalan
  0
                                      Length 19;
  Indels
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  <u>,,</u>
  Gaps
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04-MAY-2001

(first entry)

AAF74302;

Canine interleukin-5 coding sequence PCR primer

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                                                                                                                                                                                                     CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has antiallergic, antiinflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or bronchoconstriction are associated

CC with a disease or condition such as pulmonary vascocnatriction,

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis or cancer.

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC thymidines present in the target RNA serves to prevent the breakdown of

CC thymidines present in the target RNA serves to prevent the breakdown of

CC thymidines present in the target that free adenosine into the system

CC conspicition of the anti-sense oligos corresponding to

CC thymidines present in the target that free adenosine into the system

CC conspicute the system

CC conspicute the serves to prevent the breakdown of

CC thymidines present in the target RNA serves to prevent and thereby, to

CC prevent any unwanted effects due to it
                                                                                                       Query Match
Best Local S
                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung
                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 15; SEQ ID NO 10521; 763pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-093058/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-APR-2001; 2001US-0286036P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-APR-2002; 2002WO-US013143
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19
                                                                                                       Similarity
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                                                                                                                                                                       19
                                       GGAGAAGAAGACGGAGAG 2145
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Tang
                                                                                                                                                                       BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ļ
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, Shahabuddin
                                                                                                     0.6%; Score 19;
100.0%; Pred. No.
                                                                                0;
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                                                                                  Mismatches
                                                                                                                            DB 1;
                                                                                                       1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pabalan J,
                                                                                                                            Length 19;
                                                                                  Indels
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RESULT 190 AAF74302/c ID AAF743 XX

AAF74302 standard;

DNA;

22 BP.

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RESULT 191
AAC73662/c
ID AAC736
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                                                                                                                                                                                                   Mus musculus.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                             Murine IL-5 antisense oligonucleotide ISIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer and i
primer used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergi-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 47; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel canine interleukin 5 polynucleotide and polypeptides are used for generating antibodies which are useful in treating allergies in dogs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-191542/19.
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Mus sp
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  26-MAR-1999;
                                                  17-MAR-2000; 2000WO-US007318
                                                                                                       05-OCT-2000.
                                                                                                                                                                                                                                                                                                     antisense oligonucleotide; ar
IL-5 receptor-alpha; asthma;
                                                                                                                                                                                                                                                                                                                                                     Mouse; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-FEB-2001.
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                                                                                                                                                      WO200058512-A1
                                                                                                                                                                                                                                                                                inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (IDEX-) IDEXX LAB INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2196 GAGTGGATAATAGAAAGTTGAG 2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22 BP; 4 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGTGGACAATGGAAAGTTGAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               erleukin-5 (IL-5) protein. This can be used to inflammatory reactions in dogs. The present d to obtain the sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                   cancer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00371615
99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                   antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 18.8; DB 1;
Pred. No. 1.4e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                     ntiasthmatic; immunosuppressive; cytostatic;
eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aiyappa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                             #16988.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence
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is a PCR
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RESULT 192
AAC73722/c
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Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases
                                                                                                                                                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                             Example
                                                                                                                                                                                                    26-MAR-1999;
                                                                                                                                                                                                                           17-MAR-2000; 2000WO-US007318.
                                                                                                                                                                                                                                                  05-OCT-2000
                                                                                                                                                                                                                                                                            WO200058512-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                           02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAC73722 standard;
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                                                                                                                                                                                                                                                                                                                                       inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                  IL-5 receptor-alpha; asthma;
                                                                                                                                                                                                                                                                                                                                                                          Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-)
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                                                                                                                          2000-594648/56
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                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000-594648/56
                                                                                                                                                                                                                                                                                                                                                                                                   IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19;
                                                                                                                                                                           SISI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Page 48; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SISI
                                                                                     oligonucleotide compound used to in humans modulates interleukin-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAAAGAAATACATTGACCGC
                                                                                                                                                 Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Karraв JG,
                                                                                                                                                                                                                                                                                                                                                                                                   antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 4 A;
                                                             Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PHARM INC
                                                                                                                                                                           PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                    9905-00280799
                                                             64;
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95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 C; 4 G; 9 T; 0 U; 0 Other;
                                                            156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotide ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    is an oligonucleotide used for antisense
                                                                                                                                                   Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                antiasthmatic;
a; eosinophilic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.4e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                  immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                   #17989
                                                                                   treat asthma and eosinophilic signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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음 성

20

CATACTGACAGTTTGCCAGA

2371

CATACTGACACTTTGCCAGA

Query Match Best Local S Matches 19

Similarity

0.6%;

Score Pred.

18.4; No. 1

.4e+02

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Length:

0

Gaps

0

Conservative

0

Mismatches

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RESULT 193
AAC73719/c
ID AAC737
XX
AC AAC737
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Best Local S
Matches 19
                         The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosif syndrome. The oligonucleotides are also useful for research uses prevent or delay infection, inflammation or tumour formation
Sequence 20 BP; 5
                                                                                                                                                                          Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U;
                                                                                                                                                 Example
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                                                                                                                                                                                                                                                                                                  26-MAR-1999;
                                                                                                                                                                                                                                                                                                                             17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                        05-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                 WO200058512-A1
                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                IL-5 receptor-alpha; asthma;
inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense oligonucleotide; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAC73719;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAC73719
                                                                                                                                                                                                                                                                         (ISIS-)
                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
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                                                                                                                                                                                                                   2000-594648/56
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                                                                                                                                                                                                                                                                       SISI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                 20; Page 64; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGTATTTTCCTCCAGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGTATTTTCGTCCAGGCAA 1
                                                                                                                                                                                                                                              Karras
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense oligonucleotide ISIS #17986
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                                                                                                                                                                                                                                                                         PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first
                                                                                                                                                                                                                                                                                                  99US-00280799
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ب
A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA;
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                                                                                                                                                                                                                                              Mckay
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eosinophilic
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immunosuppressive; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 infection;
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RESULT 194
AAF74301
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                                                                                                                                                                                                  RESULT 195
ABX04376/c
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                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                 The
                                                                                                                          Human Interleukin 5
                                                                                                                                                                   ABX04376;
                                                                                                                                                                                        ABX04376 standard;
                                                                                                                                                                                                                                                                                                                              Sequence 20
                                                                                                                                                                                                                                                                                                                                                               cancer
                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 47; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                         generating
                                                                                                                                                                                                                                                                                                                                                                                                                          Novel canine interleukin 5 polynucleotide generating antibodies which are useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-191542/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Guo H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-FEB-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dog; interle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Canine interleukin-5 coding sequence PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF74301;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF74301 standard; DNA; 20
07-MAR-2001; 2001US-00800629.
                                                             Homo sapiens.
Synthetic.
                                                                                           Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.
                                                                                                                                               13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (IDEX-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200111049-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bos taurus.
                    12-SEP-2002
                                         US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                 present invention provides the protein and coding sequences of the ine interleukin-5 (IL-5) protein. This can be used to treat allergies cer and inflammatory reactions in dogs. The present sequence is a PCR mer used to obtain the sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   interleukin-5; IL-5; allergy; cancer;
ammatory reaction; PCR primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens.
                                                                                                                                                                                                                                                        635 CATTGGTGAAAGAGACCTTG 654
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                                                                                                                                                                                                                                            CAGTGGTGAAAGAGACCTTG
                                                                                                                                                                                                                                                                                                                              BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mermer
                                                                                                                                                                                        DNA;
                                                                                                                           antisense
                                                                                                                                                                                                                                                                                               0.6%;
                                                                                                                                                                                        20
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                                                                                                                                                                                        BP.
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                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                Score 18.4;
Pred. No. 1.
                                                                                                                                                                                                                                           20
                                                                                                                          oligonucleotide ISIS 17989.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aiyappa AP;
                                                                                                                                                                                                                                                                                                1.4e+02
                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                         and polypeptides are used for treating allergies in dogs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   世.
                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                       sequences of the to treat allergies,
                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                     0;
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US2002128216-A1 Synthetic. Homo sapiens

12-SEP-2002

Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;

eosinophilic syndrome; asthma

.mmunosuppressant;

Human Interleukin 5 antisense oligonucleotide ISIS 17986.

ABX04373; ABX04373

standard;

DNA;

20

BP.

0

13-JAN-2003

(first entry)

26-MAR-1999; 99US-00280799 17-MAR-2000; 2000WO-US007318

07-MAR-2001; 2001US-00800629

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RESULT 196
ABX04373/c
ID ABX043
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                                                                                                                     5
                                                                                                                                                                                                                            Matches
                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                      versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (DEAN/) DEAN N M.
(KARR/) KARRAS J
(MCKA/) MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 20; Page 19; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         transduction
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .ength,
                                                                                                                                                                        Match 0.6%;
Local Similarity 95.0%;
                                                                                                          2416 AAGTATTTTCCTCCAGGCAA 2435
                                                                                      20
                                                                                                                                                        19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      which modulates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MANOHARAN M
                                                                                        AAGTATTTCGTCCAGGCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Karras JG,
                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99US-00280799.
2000WO-US007318.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      relates to an antisense
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      interleukin
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R
                                                                                                                                                          0
                                                                                                                                                                          Score 18.4; DB 1;
Pred. No. 1.4e+02;
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                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    se compound of 8-30 nucleobases in (IL)-5 signal transduction. Also
                                                                                                                                                                                          Length
                                                                                                                                                            Indels
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                                                                                                                                                            Gaps
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RESULT 197
ABX04316/c
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Best Local S
Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             include are a pharmaceutical composition comprising the antisense oligonuclectide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a letring the expression of mammalian IL-5 receptor a letring the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian IL-5 receptor a repression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense content of the stargetting human IL-5 receptor a sequence is an antisense content of the stargetting human IL-5 receptor a sequence is an antisense content of the stargetting human IL-5 receptor a sequence is an antisense content of the stargetting human IL-5 receptor a sequence is an antisense or condition. The present sequence
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                                                                                             26-MAR-1999;
17-MAR-2000;
                                                                                                                                           07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                          US2002128216-A1
                                                                                                                                                                                                                                                                   Mouse; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                   ABX04316;
                                                                                                                                                                                                                                                                                                                                                                                                                ABX04316 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                            12-SEP-2002
                                                                                                                                                                                                                                                                                                                 Mouse Interleukin 5 antisense oligonucleotide ISIS 16988
                                                                                                                                                                                                                                                                                                                                                    13-JAN-2003
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(KARR/)
(MCKA/)
(MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example
                                                                 (DEAN/)
                                                 KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2352 CATACTGACACTTTGCCAGA 2371
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19;
                DEAN N M.
KARRAS J G.
MCKAY R.
MANOHARAN M.
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KARRAS J G.
MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATACTGACAGTTTGCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                               2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                    (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modulates
                                                                                                               9905-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; 4 C; 5
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95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                    entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 18.4; D
Pred. No. 1.4e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G; 6 T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          compound of 8-30 nucleobases IL)-5 signal transduction. Als
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.4e+02;
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RESULT 198
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XX 23-SEE
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XX Homo;
XW 05-00;
XW 05-00;
XW 05-00;
XW 11-5;
XW 11-5;
XW 11-5;
XW 11-5;
XW 11-5;
XW 11-6;
XW 07-MAI
XX 06-MAI
XX 01-MAI
PA (MCKA, PA (MCKAR, PA (MCKAR
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting mouse IL5
                                                                                        (DEAN/)
(KARR/)
(MCKA/)
(MANO/)
                                                                                                                                                                                                                                       26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; interleukin-5; IL-5; 88; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human interleukin-5 (IL-5) DNA antisense oligonucleotide #34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or dilu
                                                                                                                                                                                                                                                                                                                                                        06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                  24-JUN-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          eosinophilic
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                                                                                        ) DEAN N M.
) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             syndrome; asthma; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mckay R,
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Pred. No. 1
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Karras JG,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 199
ADR11993/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an CC antisense compound so that IL-5 signal transduction, IL-5 or 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local (
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                                                                                                                                          26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              eosinophilic syndrome; asthma; antiasthmatic; cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mouse; interleukin-5; IL-5; ss; antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Murine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR11993 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -5 (II-5) signal transduction. The antisense compound is an anti-
oligonucleotide targeted to a nucleic acid molecule encoding a m
II-5 or II-5 receptor a, where the antisense compound modulates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The
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                                                                                                                                                                                                                                                                                         06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                    24-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-2004
(DEAN/) DEAN N M. (KARR/) KARRAS J G. (MCKA/) MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2352
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense compound modulating interleukin-5 signal transduction, in promoting apoptosis and in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2004-479669/45
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                                                                                                                                              99US-00280799.
2000WO-US007318.
2001US-00800629.
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Pred. No. 1
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Sequence

20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

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CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense CC oligonuclectide comprises at least one modified internucleoside linkage, CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC II-5 signal transduction or II-5 or II-5 receptor a expression, or a cCC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 creceptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a sentisense compounds, methods and compositions are cuseful in promoting apoptosis and in treating eosinophilic syndrome and contacting of the invariance of the invariance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -5 (IL-5) signal transduction.
oligonucleotide targeted to a r
                                                              oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MANO/) MANOHARAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID
                                                              of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO 15; 77pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ction. The antisense compound is an a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ,₩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Manoharan
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a mammalian

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                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                            Human; interleukin-5, IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; Cytostatic.
                                                                                                                                                                                  Human interleukin-5 (IL-5) DNA antisense oligonucleotide #37
                                                                                                                                                                                                                                                 ADR12053
                                           06-OCT-2003; 2003US-00679532.
                                                                                     US2004121376-A1
                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                 1986 TAAAGAAATACATTGACGGC 2005
                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                 standard; DNA;
                                                                                                                                                                                                                                                                                                       TAAAGAAATACATTGACCGC 1
                                                                                                                                                                                                                                                                                                                                                 Conservative
 2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                        (first entry)
                      99US-00280799
                                                                                                                                                                                                                                                                                                                                                          0.6%;
95.0%;
                                                                                                                                                                                                                                                                                                                                                 0
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                            .4e+02;
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                                                                                                                                                                                                                                                                                                                                  RESULT 201
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Best Local S
Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or IL-5 receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a is signal transduction in a poptosis comprises at a soforms is altered, or expression of membrane IL-5 receptor a is modulated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligonucleotide targeted to a nucleic acid molecule encoding a mammaliar II-5 or II-5 receptor a, where the antisense compound modulates the expression of mammalian II-5 or II-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage,
                                              WO9402595-A1
                                                                          Synthetic
                                                                                                         cardiovascular
                                                                                                                    Interleukin-5; specific; cleavage; target RNA; protein; (inhibitor; inhibition; ribozyme; treatment; prophylaxis; psoriasis; asthma; inflammatory diseases; restenosis;
                                                                                                                                                                                        Enzymatic
                                                                                                                                                                                                                     25-MAR-2003
26-JUL-1994
                                                                                                                                                                                                                                                                                                   AAQ57192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dean
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                               AAGTATTTTCCTCCAGGCAA 2435
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                                                                                                                                                                                        RNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                           0.6%;
llarity 95.0%;
Conservative
                                                                                                                                                                                                                    (revised)
                                                                                                                                                                                      molecule IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of the invention.
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                                                                                                                                                                                                                                                                                                 mRNA;
                                                                                                                                                                                                                    entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75;
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                                                                                                                                                     cleavage; target RNA; protein; expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        77pp; English
                                                                                                                                                                                   mRNA target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 18.4; D
Pred. No. 1.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20
                                                                                                                                      prevention,
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Best Local Sim:
Matches 18;
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07-DEC-1992;
07-DEC-1992;
07-DEC-1992;
19-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This is an II-5 mRNA target sequence (nucleotide no. 88) of an enzymant RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or aschmatic condition. The concn. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of lower than that of an antisense oligonucleotide and the specificity of
                                                                                                                                                                          gene expression; downregulation; interleukin-5; IL-5; ICAM-
intercellular adhesion molecule; rel A; tumour necrosis fact
TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncoge
translocation; chronic myelogenous leukaemia; CML; cancer;
philadelphia chromosome; inflammation; autoimmune disease;
atherosclerosis; myocardial infarction; stroke; restenosis;
transplant rejection; rheumatoid arthritis; psoriasis;
myocardial ischaemia; Kawasaki disease; septic shock; HIV;
                                                                                                                                                                human
                                                                                                                               Homo
                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                        25-MAR-2003
22-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18
                                                         23-FEB-1995;
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                                                                                                                                                                                                                                                                                                                                                                                    AAT54734 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          conditions.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-JUL-1993;
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                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1994-048853/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          596 CCTACGTGTATGCCATCC 613
                                                                                                                                                                                                                                                                                                 IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3, Page 17; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 100.
18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RIBOZYME
                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTACGTGTATGCCATCC 18
                                                                                                                                                                                                                                                                          nucleic
                                                                                                                                                                                                                                                                                                 hammerhead ribozyme target sequence (nt. position
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 3 A;
                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    molecules which cleave mRNA - used to treat or arthritic, stenotic or cardiovascular diseases
                                                                                                                                                                                                                                                                                                                                   (revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92US-00989848.
92US-00989849.
93US-00008895.
                                                         95WO-IB000156
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92US-00987132
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                                                                                                                                                                                                                                                                          acid; ribozyme; trans cleavage; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 C; 3 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                    BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . No.
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                                                                                                                                                                   deficiency
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                         oncogene
                                                                                                                                                                                                                                                     factor;
                                                                                                                                                                 syndrome; AIDS;
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<u>.</u>

23-FEB-1994; 29-MAR-1994; 04-APR-1994; 07-APR-1994;

94US-00201109. 94US-00218934. 94US-00222795. 94US-00224483.

Human

IL-5 hammerhead ribozyme target sequence

(nt.

position

86).

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RESULT 2
AAT54731
ID AAT
XX AAT
AC AAT
XX 25-
DT 22-
XX
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                                                                                                                                                                                                                                     CC The present sequence represents a preferred target sequence for an CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (II-5) mRNA at the nucleotide base position indicated in the DE line. Regions CC of the mRNA that do not form secondary folding structures and that CC contain potential hammerhead and hairpin ribozyme cleavage sites were CC identified by computer analysis. Ribozymes directed against these mRNA CC sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the II-5 target sequences CC and thereby inhibit II-5 expression, making them useful for treating CC chronic asthma, e.g. by inhibiting the synthesis of II-5 in lymphocytes CC and preventing the recruitment and activation of eosinophils. The CC ribozymes can also be used to treat eosinophilia (related to parasitic CC infection or with pulmonary infiltration) and I-tryptophan-associated CC eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI CC field.)
                                                                                                                                                                    Query Match
Best Local S
Matches 11
                                                                                                                                                                                                                                                                                                                                                                            ine present
enzymatic nuc
5) mRNn
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02-SEP-1994

08-SEP-1994

23-SEP-1994

23-SEP-1994

23-CCT-1994

03-CCT-1994

07-CCT-1994

11-CCT-1994

11-CCT-1994

10-NOV-1994

10-NOV-1994

28-NOV-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-APR-1994;
15-APR-1994;
18-MAY-1994;
06-JUL-1994;
15-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grimm
Modak
Tracz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-AUG-1994;
17-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Ribozymes having modif
in inhibiting disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stinchcomb
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          25-MAR-2003
22-APR-1997
                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                           Claim
                                                                  AAT54731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-)
                                                                                                                                               913 GATTCCTGTTCCTGTACA 930
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                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                   18
                                                                  standard;
                                                                                                                         GAUUCCUGUUCCUGUACA
                                                                                                                                                                                                                                                                                                                                                                                                                           Page 222; 407pp; English
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Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Karpeisky
Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'n,
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                                                                                                                                                                     Conservative
          (revised)
(first entry)
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94US-00245736.
94US-00245736.
94US-00271280.
94US-00291433.
94US-00292620.
94US-00300000.
94US-00303039.
94US-00311748.
94US-00311749.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chowrira
                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified bases and methods for producing them -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PHARM INC
                                                                                                                                                                                                                   Α;
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y A, Kisich K,
Beigleman L, S
                                                                  RNA;
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                                                                                                                                                                               0.6%;
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Pred. No. 1.3e+02;
"" matches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 genes.
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dler D, Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dudycz LW;
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gene expression; downregulation; interleukin-5; IL-5; ICAM-intercellular adhesion molecule; rel A; tumour necrosis fact TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncoge translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syr
                                                                                                                                                                                                                                                                                                                                                                              Enzymatic
   Homo
sapiens
                                                                                                                                                                                                                                                                                                                                                       nucleic acid; ribozyme; trans cleavage; inh
                                                                                                                                                                                                                                                                                                                                                                                        inhibition;
                                                                                                                                                                                                                                                                                        oncogene;
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                                                                                                   syndrome;
                                                                                                   AIDS;
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23-FEB-1994
29-MAR-1994
04-APR-1994
15-APR-1994
15-APR-1994
15-APR-1994
16-UTI-1994
15-AUG-1994
15-AUG-1994
17-AUG-1994
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23-SEP-1994
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21-CCT-1994
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11-OCT-1994
11-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                            23-FEB-1995;
(RIBO-)
 RIBOZYME
                        94US-00201109
94US-00218934
94US-0022795
94US-00228041
94US-00228041
94US-00228041
94US-0029132
94US-0029132
94US-0029132
94US-0029132
94US-00311486
94US-00311749
94US-00316771
94US-0031477
94US-00316771
94US-00334673
94US-00337608
94US-00337608
94US-00337608
94US-00337608
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  PHARM INC.
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Grimm Modak Tracz Stinchcomb O'A'Q Karpeisky Pavco P, Ueman Ħ, ַס, צ Chowrira howrira B, Direnzo A, ky A, Kisich K, Matul , Beigleman L, Sulliv , Wincott FE, Woolf T Direnzo A, enzo A, Draper KG, Dudycz LW; , Matulic-Adamic J, Mcswiggen JA; Sullivan SM, Sweedler D, Thompson Woolf T; ğ

1995-351090/45.

Ribozymes having modified bases and in inhibiting disease related genes genes. methods for producing them for

Claim <u>ب</u> Page 222; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes

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Matches 13
                                                                23-EEB-1994

29-MAR-1994

04-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

15-AUG-1994

16-AUG-1994

17-AUG-1994

17-AUG-1994

19-AUG-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

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04-NCV-1994

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04-NCV-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IC-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndron
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22-APR-1997
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1 UGGAGCUGCCUACGUGUA 18
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13; Conserv
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(first entry)
94US-00227958
94US-00228041
94US-002245736
94US-00271280
94US-00291433
94US-00292620
94US-0030000
94US-00310303
94US-00311486
94US-00311749
94US-00311749
94US-00316771
94US-0031933
94US-00318497
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94US-0031933
94US-00337508
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94US-00337537
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94US-00218934.
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1.3e+02;
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Query Match
Best Local S
Matches 11
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Grimm S, K
Modak A, P
Tracz D, U
                                                                                                                                         The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophila (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia and proventing the synthesis of II-5 in lymphocytes in lymphocytes are ribozymes can also be used to treat eosinophila (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia and proventing the synthesis of II-5 in lymphocytes in lymphocytes and preventing the synthesis of II-5 in lymphocytes and preventing the recruitment and activation of eosinophila. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ribozymes having modified bases and in inhibiting disease related genes
                                                                                   Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim
                                                                                                                                field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-1995;
                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RIBOZYME
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 222; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DT, Chowrira B, Direnzo A, Draper KG, Dudycz Karpeisky A, Kisich K, Matulic-Adamic J, Mcswi
Ravoo P, Beigleman L, Sullivan SM, Sweedler D, Usman N, Wincott FE, Woolf T;
                                                                                   BP;
      Conservative
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                                                                                   A; 6
                       0.6%;
                                                                                   C; 3 G; 0 T; 7 U; 0 Other;
7;
    Score 18; DB
Pred. No. 1.3e
7; Mismatches
                       18; DB 1;
No. 1.3e+02;
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    0
                                             Length 18
      Indels
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Mcewiggen JA;
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      Gaps
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                                                                                                                               gene expression; downregulation; interleukin-5; IL-5; ICAM: intercellular adhesion molecule; rel A; tumour necrosis fact TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogo translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syn
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22-APR-1997
                            31-AUG-1995
                                                                                                                                                                                                                                                                       Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
                                                                                                                                                                                                                                                                                                       Human IL-5
                                                                                                                                                                                                                                                                                                                                                                               AATS4733;
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                                                          WO9523225-A2
                                                                                      Homo sapiens
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                                                                                                                                                                                                                                                                                                     hammerhead ribozyme target sequence (nt. position 172).
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(first entry)
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                                                                                                                                    deficiency syndrome; AIDS;
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23-FEB-1995;

95WO-IB000156

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                                                            Query Match
Best Local S
                                                Matches
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29-MAR-1994;
04-APR-1994;
07-APR-1994;
15-APR-1994;
15-APR-1994;
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06-JUL-1994
15-AUG-1994
16-AUG-1994
17-AUG-1994
19-AUG-1994
02-SEP-1994
02-SEP-1994
23-SEP-1994
23-SEP-1994
23-SEP-1994
03-OCT-1994
07-OCT-1994
11-OCT-1994
                                                                                                                                  The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophila (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
                                                                                                                                                                                                                                                                                                                                                                                                                                 Grimm
Modak
                                                                                                 Sequence 18
                                                                                                                                                                                                                                                                                                                                                       Ribozymes having modified bases and methods for producing them in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                 Claim
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23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                               WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-)
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           674 GAACTCTGCTGATAGCCA 691
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                                                  l Similarity
14; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RIBOZYME PHARM INC.
GAACUCUGCUGAUAGCCA
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Usman N,
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Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson
Usman N, Wincott FE, Woolf T;
                                                                                                 ВP;
                                                  Conservative
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94US-00271280.
94US-00291433.
94US-00291433.
94US-00291433.
94US-00291520.
94US-0030000.
94US-00311486.
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94US-00316717.
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94US-003345516.
94US-00337508.
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94US-00218934.
94US-00222795.
94US-00224483.
94US-00227958.
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                                                            0.6%;
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                                                                                                 C; 4 G; 0 T; 4 U; 0 Other;
  18
                                                4;
                                                            Score 18; DB 1;
Pred. No. 1.3e+02;
                                                  Mismatches
                                                                         Length 18;
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RESULT 206 AAT76222/c ID AAT762: XX

AAT76222 standard; DNA; 18 BP

19-DEC-1996.

WO9640162-A1

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RESULT 207
AAT76220/c
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Best Local Sim
Matches 18;
                                                                                                                                                                                                                                                                                                                                                                                                       A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMIL5AS3 specific for the human IL5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyperreactive airways
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nyce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Asthma; airway epith chronic obstructive
                                                                                       Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin;
                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 5; Page 31; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-051871/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-JUN-1996;
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                                                                                                                            Human IL5 antisense oligonucleotide HUMIL5AS1.
                                                                                                                                                       12-SEP-1997
                                                                                                                                                                                                          AAT76220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             subject.
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                                                                                                                                                                                                                                                                                                   1643 AGAAAACAAACAAAAAAC 1660
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                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Metzger WJ;
                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                            AGAAAACAAACAAAAAAC 1
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ctive pulmonary disease; bronchitis; interleukin;
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                                                                                                                                                                                                          DNA;
                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                       entry)
                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                        Score 18; DB 1; Lo
Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                          88
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0

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RESULT 208
AAX54018/c
ID AAX540
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMIL5ASI specific for the human IL5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyperreactive airways
                                                                                                                                                                                                                                              impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis; pulmonary vasoconstriction; inflammation; allergic acute asthma, salethma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer;
                                            17-SEP-1997;
09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                            Human IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAXS4018 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rearment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of subject
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-JUN-1996;
                                                                                           17-SEP-1998;
                                                                                                                                                                                                                     prostate
                                                                                                                                                                                                                                  colon cancer; breast cancer; lung cancer; pancreatic cancer;
hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                         Antisense oligonucleotide; multiple target; antisense treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nyce JW,
                (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYEC-) UNIV EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGGGGGAAACAGGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAGGGGGGAAACAGGGA 342
                                                                                                                                                                                                                     cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Metzger WJ;
                                                                                                                                                                                                                                                                                                                                                                                          antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31; 71pp;
                                            97US-0059160P.
98US-00093972.
                                                                                           98WO-US019419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-00474497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96WO-US009306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 18; pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB, 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3' codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3' cend and the juxta-section between coding and non-coding regions and all conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, respiratory disease syndrome, pain, cystic fibrosis, pulmonary hyperrension, colon cancer, band cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, colon cancer, breast cancer, lung cancer, pancreatic cancer, as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nyce
Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 49; 120pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides used in treatment of, e.g. pulmonary vasoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ä
BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;
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Query Match Best Local S Matches 18 1643 AGAAAACAAACAAAAAAC 1660 18; 18 AGAAAACAAACAAAAAAC 1 Similarity Conservative 0.6%; 0; Mismatches Score 18; DB 1; L Pred. No. 1.3e+02; 0 Length 18 Indels 0 Gaps

0

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05-JUL-1999
                                                       AAX54016;
                                                                               AAX54016 standard;
Human IL-5 antisense oligonucleotide fragment.
                           (first
                                                                                 DNA; 18
                           entry)
                                                                                  ₽P
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RESULT 209
AXX54016/c
ID AXX540
XX AXX540
AC AAX540
DT 05-JUL
XX
Antise
KW Impair
KW impair
KW pulmon
XX colon
XX colon
XX colon
XX colon
XX colon
XX loyo13
XX pulmon
XX in pulmon
XX colon
XX colon
XX colon
XX in pulmon
XX in pulmon
XX colon
XX in pulmon
XX Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; pulmonary hypertension; pulmonary vasoconstriction; emphysema; 17-SEP-1997; 09-JUN-1998; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis; Synthetic 17-SEP-1998; 25-MAR-1999 prostate cancer; ss. WO9913886-A1 97US-0059160P 98US-00093972 98WO-US019419

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RESULT 210
AAA33462/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC directed against at least 2 mRNAs selected from target genes, coding and connon-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonuclectides may be derived conditions expanses and sequences AAX55272-74. These multiple target oligonuclectides conditions or mixtures. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung consisted with impaired respiration and inflammation, including lung concute asthma, allergies, asthma, impeded respiration, respiratory construction, emphysema, chronic obstructive pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary concers, breast cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, continual and lungs, including lung concers which may metastasize or have metastasized content to the lungs, including breast and prostate cancer
   Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                            Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothicate; impaired respiration; inflammation; allergy phosphorothicate; impaired respiration; infibitor; antinflammatory; allergic disease; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cytetic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 49; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides used in treatment of,
                                                                                                                                                                                                                                                                                                                                                                                                                 28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA33462 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The specification describes antisense oligonucleotides
                                   03-AUG-1998;
                                                                    03-AUG-1999;
                                                                                                                                              WO200009525-A2
                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                           Low adenosine antisense oligonucleotide SEQ ID NO:1151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYEC-) UNIV EAST CAROLINA
(UYEC-) UNIV EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 AAAGGGGGAAACAGGGA 1
                                                                                                                                                                                                                 leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGGGGGGAAACAGGGA 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                   98US-0095212P
                                                                        99WO-US017712
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
1.3e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (AAX52869-X55271)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthingeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of ONs reduces side effects. The A-containing ONs break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and infiammation. AAA32313 to AAA35312 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating
                                                                        nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA3392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nyce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a new composition comprising an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   409; 1343pp; English
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Query Match
Best Local S
Matches 18
                 1643 AGAAAACAAACAAAAAC 1660
18
                                            Similarity
AGAAAACAAACAAAAAAAC 1
                                   Conservative
                                100.0%; =-
                                                      0.6%;
                                   Score 18; DB; Pred. No. 1.3:
                                                     DB 1; Length 18;
                                   1.3e+02;
hes 0;
                                    Indels
                                    0
                                    Gaps
                                    0
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Sequence 18

BP; 0

A; 1 C; 3 G; 14 T; 0

U; 0 Other;

the

the

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AAA33460 standard; DNA; 18
28-JUL-2000
(first entry)
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Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer: lawbeamia; lambama. Low adenosine antisense oligonucleotide SEQ ID NO:1149. leukaemia; lymphoma; carcinoma; metastasis;

Homo sapiens.

WO200009525-A2

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A
                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 212
AAF19582/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CC inflammation. The ON can have antiinflammatory, antergree, and control of the treatment of diseases associated with inflammation, compositions are consecuted airways, including lung disease and diseases whose secondary ceffects afflict the lungs of a subject. They can be used for treating cego. Including lung disease and diseases whose secondary ceffects afflict the lungs of a subject. They can be used for treating cego. Including lung disease and diseases whose secondary cego. Including lung disease and diseases whose secondary cego. Including properties, pulmonary vasoconstriction, allergies, asthma, companied to the control of the control of the control of the lungs, including pulmonary disease (COPD), and cancers which may metastasise to the lungs, including carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the constant and prostate cancer. The A-containing ONs break down with the concers which activates adenosine which the creeptors causing control of the sequences side effects. The A-containing ONs break down with the concers which correspond to SEQ ID NO:1 to 2815, and then the last 185 cequences are also called SEQ ID NO:1 to 185, but the sequences differ control of the present intention on the sequences given in the disclosure of the present invention on the sequence content of the content of the content of the present invention with the sequence content of the content of the content of the present invention on the sequence content of the present invention on the sequence content of the present invention on the sequence content of the content of the content of the content of the present invention with the sequence content of the present invention on the sequence content in the sequence content of the present invention on the present content of the c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 18
                    Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
respiratory distress syndrome; pulmonary hypertension; emphyse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                              14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                               AAF19582 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 18; Page 408; 1343pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-AUG-1999;
                                                                                                                                                                                                                             Human ILS polynucleotide fragment #1149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-205971/18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    325 AAAGGGGGGAAACAGGGA 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 AAAGGGGGAAACAGGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EAST CAROLINA
                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0095212P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US017712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9 C; 1 G; 8 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 18; DB; Pred. No. 1.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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AAF19584/ ID AAF1

AAF19584 standard;

DNA; 18

RESULT 213

밁 S

18

325 AAAGGGGGGAAAACAGGGA 342

Query Match Best Local Matches

18;

Conservative

0,

Similarity

100.0%;

0.6%;

Score 18; Pred. No. Mismatches

DB 1;

Length 18; Indels

1.3e+02

<u>.</u>

Gaps

0,

Sequence 18

BP; 0

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9 C; 1 G; 8 T; 0 U; 0 Other;

XXX

AAF19584;

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C expression and or activity of target polypeptides associated with activating peptide factors and transmitters, transcription factors, commonoglobulins and antibodies, antibody receptors, cytokines and commonoglobulins and antibodies, antibody receptors, cytokine and commonoglobulins and antibodies, antibody receptors, cytokine and commonoglobulins and antibodies, and their receptors, cytokine and commonoglobulins and antibodies, and their receptors, cytokine and commonoglobulins and peripheral nervous and non-nervous system peptide commonoglobulins, growth factors, vasoactive peptides and commonoglobulins, growth factors, vasoactive peptides and committers, defensins, growth factors, vasoactive peptides and committers, defensins, growth factors, vasoactive peptides and committers, defensins, growth factors, vasoactive peptides and committers, committers, defensins, growth factors, vasoactive peptides and commonoglobuling proteins and malignancy associated proteins. The concluding respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, altergy(ies) and/or condition selected from pulmonary vasoconstriction, inflammation, commonoglobuling, asthma, impeded respiration, respiratory distress syndrome (C RDS), pain, cystic fibrosis (CP), allergic rhinitis (AR), pulmonary (RDP), componer (C RDS), pain, cystic fibrosis (CP), allergic rhinitis (AR), pulmonary cancer. AAF18434 to AAF21543 represent human polynucleotide conformed common conformation of the present incention of the present incention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          oligonuclectides and compositions (I) comprising them. In the antis oligonuclectides the A is replaced by a 'Universal' or alternative (I) can have respiratory, bronchodilator, antiinflammatory, analyse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunosuppressive, antiasthmatic, hypotensive and cytostatic activities the antisense oligonucleotides and (I) can be used to down-regulate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chronic obstructive pulmonary disease; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes low adenosine (A) content antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 14; Page 208; 1592pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-679539/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nусе JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200062736-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0127958P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  analgesic,
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WO200062736-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human ILS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      surfactant depletion; respiratory; bronchodilator; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                airway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polynucleotide fragment #1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense oligonucleotide; phosphorothioate; allergy;
disorder; bronchoconstriction; lung inflammation;
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Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers WPI; 2000-679539/66.

(NYCE/)

UNIV EAST CAROLINA.

06-APR-1999;

99US-0127958P

24-MAR-2000; 2000WO-US008020

26-OCT-2000

Claim 14; Page 208; 1592pp; English.

and respiratory obstructions.

CC lung/respiratory disorders and malignancies, such as stimulating and CC activating peptide factors and transmitters, transcription factors, cc immunoglobulins and antibodies, antibody receptors, cytokines and CC chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and CC chemokine receptors, adenosine receptors, bradykinin receptors, central CC nervous system (CNS) and peripheral nervous and non-nervous system peptide receptors, binding proteins and malignancy associated proteins. The CC transmitters defensins, growth factors, vasocative peptides and CC receptors, binding proteins and malignancy associated proteins. The CC antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or CC condition selected from pulmonary vasoconstriction, inflammation, CC allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary transplanteation rejection, pulmonary disease (COPD), CC pulmonary transplanteation rejection, pulmonary disease (COPD), and/or cancer. AAP18434 to AAF21543 represent human polynucleotide condition of the present invention of the present human polynucleotide. oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base (I) can have respiratory, bronchodilator, antiinflammatory, analyssic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with The present invention describes low adenosine invention (A) content antisense ing them. In the antisense

Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

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Matches 18
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ilarity 100.0%;
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Score 18; DB; Pred. No. 1.3
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         DB 1; Le
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                                                                                hybrid molecules, detecting amplified products and comparing the amplified products from each sample to identify distinctive amplified products coding for at least one secreted or transmembrane protein. The method is useful for discovering novel secreted and/or transmembrane proteins which are important for cell processes and play an important role in determining its phenotype, and which act as mediators for the transfer of signals from external environment into the cell itself, thus modulating gene expression. Sequences ABX03792-ABX03869 represent DNA encoding the control of the cont
                                                                                                                                                                                                                                                                                                                                                           The invention relates to a differential display comprising contacting cDNA with a first primer that hybridises to an oligonucleic sequence coding for a leucine-rich motif, and with a second oligonucleotide primer to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from at least 2 samples, synthesising cDNA from the RNA of each sample, contacting the cDNA with a first primer that hybridises to an oligonucleotide primer to form cDNA-hybrid molecules, amplifying the cDNA bybrid molecules, amplifying the cDNA bybrid molecules, amplifying the cDNA bybrid molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Differential display method for identifying secreted or transmembrane protein, comprises contacting a DNA with a first primer that hybridize to a sequence coding for a leucine-rich motif and with a second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide primer.
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P-PSDB; ABG98398.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA encoding secreted protein signal peptide sequence #78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-JAN-2003
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                                                               encoding
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                                                           secreted protein signal peptide sequences
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protein;

hybridizes

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AGTTTGCTAGCTCTTGGA 18

Query Match Best Local S Matches 18

Similarity

0.6%;

Score 18; Pred. No.

DB 1; L 1.3e+02;

Length 18; Indels

18;

Conservative

0,

Mismatches

0;

Gaps

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AGTTTGCTAGCTCTTGGA 591

Sequence 18

BP; 3 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

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                                                                                                                                                                                       The invention relates to a novel pharmaceutical composition, which has a CC first active agent comprising an oligonucleotide antisense to the CC initiation codon, coding region, 5' or 3' end genomic flanking regions, CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of CC junctions of genes encoding a polypeptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an CC antiinflammatory steroid and ubiquinone. A composition of the invention CC immunosuppressive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapeutic respiratory effect of an CC antiinflammatory steroid in a subject, for reducing levels of adenosine creceptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject tissue, or treating bronchocomstriction, CC lung inflammation, lung allargies, or a respiratory disease or condition. CC specification, but was obtained in electronic format directly from WIPO Cat firm, wino, inframblehad not segmences.
                                                                        Matches
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Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid, ubiquinone; antiinflammatory; antiallergic; antisathmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human IL-5 antisense fragment no.1142.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 10520; 872pp; English.
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                                                                                                                                                                           ftp.wipo.int/pub/published_pct_sequences
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18
                                                                                     Similarity
                                AGAAAACAAACAAAAAC 1660
                                                                      Conservative
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, Shahabuddin S;
                                                                                  100.0%;
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                                                                                                                                           G; 14 T; 0 U; 0 Other;
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Pred. No. 1.3e+(
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                                                                                     1.3e+02;
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                                                                                                                                                                                                                                                                                                 first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an artisinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine of, or guirding mation, but was obtained in electronic format disease or condition.

Note: The sequence data for this patent is not represented in the printed specification, but was obtained for seminance.
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Matches
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Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory; steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                       Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel pharmaceutical composition, which has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; SEQ ID NO 10518; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-229219/22.
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                                                                                                         Local
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325 AAAGGGGGGAAACAGGGA 342
                                                                                                            Similarity
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                                                                                                                                                                                                              BP; 0 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
                                                                        Conservative
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                                                                        0
                                                                                                         Score 18; DB 1;
Pred. No. 1.3e+(
                                                                        Mismatches
                                                                                                            1.3e+02
                                                                                                                                         Length 18;
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RESULT 217

RESULT 216

DNA; 18

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ABD19250/c

ABD19250/c

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ABD19250;

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ABD19250;

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DT

29-JUL-2004 (first (
XX

Human IL5 DNA fragmes

XX

Human; antisense; br

KW

Human; antisense; br

KW

FROM

FR
                                     CC oligonucleotides are derived from a gene encoding or regulating dysfunction of a target polypeptide associated with lung airway or lung CC dysfunction or cancer and can be anti-sense to the corresponding mRNA. CC The invention also describes a kit, that comprises: (a) a delivery CC device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a CC beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production of activity, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The CC pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, coligonary condition, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel composition (a) a first active agent comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors of the property of the composition of the property of the property of the composition of the compos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 15; SEQ ID NO 10518; 763pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory disease; perfection; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-APR-2001; 2001US-0286036P
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Pred. No. 1.3e+
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comprising oligonuclectides, effective for alleviating to bronchoconstriction, respiratory tract inflammation, allergies and creducing adenosine (A) or (A) receptors, reducing adenosine (A) or (A) receptors, constructed to a mammal. The coligonuclectides are derived from a gene encoding or regulating conjugation of a target polypoptide associated with lung airway or lung compression of a target polypoptide associated with lung airway or lung dyfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery constitution also describes a kit, that comprises: (a) a delivery constitution also describes a kit, that comprises: (a) a delivery constitution and containers, (b) the oligonuclectides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallersic, antinflammatory, antiasthmatic, analyses of the invention or the invention and in a definition is useful for preventing or the beta-adrenergic agonist. The composition is useful for preventing or the treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypoptide present in the lungs. The

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targe nucleic acids associated with lung airway or lung dysfunction,

targeted

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Miller Мусе JW,

Li Y, Tang

Sandrasagra A, L, Shahabuddin

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Katz E,

Pabalan

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(EPIG-)

EPIGENESIS PHARM INC

24-APR-2001; 2001US-0286036P

23-APR-2002; 2002WO-US013143

This invention describes a novel composition (a) a first active agent,

Claim 15; SEQ ID NO 10520; 763pp; English

bronchodilating

agent.

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RESULT 219
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Best Local S
Matches 18
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                The present sequence is the human interleukin-5 (hIL-5) promoter mutant palindromic regulatory element (PRE1-4), which inhibits the activity of the hIL-5 promoter and therefore IL-5 expression. PRE1-4 can be used to modulate IL-5 activity by acting on the corresponding region of the hIL-promoter, especially in cases of asthma and eosinophila or in immunocompromised subjects. PRE1-4 specifically inhibits transcription from the IL-5 promoter, as no such sequence is present in genes encoding
                                                                                                                                                                                                                                                                                                                Nucleic acid sequence that inhibits activity of the interleukin-5 promoter - and proteins that interact with this sequence to modulate IL-5 gene expression, for treating asthma, eosinophilia or immune-compromised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18
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Synthetic.
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                                                                                                        of the hIL-5
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Query Match Best Local Similarity

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(first entry)

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                                                                                                                                                                                                                                                                                                                                                                                                                                        administered to the patient by intranasal gene transfer. It is useful fit treating respiratory viral infections, especially respiratory syncytial virus (RSV). The composition of the invention may be administered to an infant or other immunosuppressed individuals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence was used to analyse the mRNA expression of mouse interleukin-5 (IL-5) in an example illustrating an invention relating to a gene therapy composition for the prevention of respiratory infections. The composition comprises DNA encoding interferon (IFN) gamma and may be a composition comprises DNA encoding interferon (IFN) gamma and may be
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New gene therapy composition useful infections, particularly RSV.
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                                                                                                        ADG64618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BEHE/)
                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                   2167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IL-5
                                                                                                                                                                                                                       19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BEHERA
KUMAR M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOHAPATRA S
MATSUSE H.
                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGATATGCCATTATTAGG 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGATATGCCATTATTAGG
                                                                                                          standard;
                                                                                                                                                                                                                                                                 TGCAAGAGTTTCTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense
                                                                                                                                                                                                                                                                                                                                                                                                     BP; 7 A; 6 C; 3 G; 3 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matsuse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0075588P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00259411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                          RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ß
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                  0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PC2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ħ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                          19
                                                                                                          ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Behera AK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     쁑
                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                   2185
                                                                                                                                                                                                                                                                                                                                  Pred.
                                                                                                                                                                                                                                                                                                                                                         Score
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                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                       17.4;
                                                                                                                                                                                                                                                                                                                                    ŏ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the prophylaxis of respiratory
                                                                                                                                                                                                                                                                                                                                  1.5e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kumar
                                                                                                                                                                                                                                                                                                                                                                                                     0 Other;
                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3
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                                                                                                                                                                                                                                                                                                                                                       Length 19;
                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                               0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                       The invention relates to short interfering nucleic acids (siNA) which CC downregulate expression of the human G72 gene by RNA interference. The CC siNAs may or may not comprise ribonucleotides and may be double or single CC stranded. They further comprise sense and antisense regions, or CC alternatively are assembled from a sense oligonucleotide and an antisense CC oligonucleotide. Specifically, the siNAs include short interfering RNA CC (shRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA CC (shRNA). The siNAs can be unmodified or chemically modified, can contain CC (shRNA). The siNAs can be unmodified or chemically modified, can contain CC (shRNA) in vitro or in vivo delivery of siNA; conjugates and/or complexes CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes CC for siNA; and vectors that express siNA. The siNAs are used to modulate cof a variety of conditions. The human G72 siNAs have neuroleptic activity and can be used for treating schizophrenia. The siNAs are also useful for CC drug screening, diagnosis, therapeutic target identification and
                                                                         Query Match
Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-FEB-2002; 2002US-0358580P.
11-MAR-2002; 2002US-0363124P.
06-JUN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409293P.
05-DEC-2002; 2002US-0409293P.
15-JAN-2003; 2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA, micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; dlagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; neuroleptic;
                                                                                                                                                                                     validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human G72-target double-stranded siNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human G72 siNA oligonucleotide SEQ ID NO:64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; SEQ ID NO 64; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-FEB-2003; 2003WO-US004397.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003070743-A1.
                                                                                                                                                    Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
                                   253 ATTTTAAGAAATGCAAATG 271
-
                                                                                        Similarity
 AUUUUAAGAAAUGAAAAUG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              interfering nucleic acid, useful e.g. for treatment and of schizophrenia, downregulates expression of the G72 g
                                                                                                                                              BP;
                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Beigelman L,
                                                                                                                                                10
                                                                                                                                                A; 0 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                        0.5%;
                                                                         6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Haeberli P;
                                                                                      Score 17.4; DB 1; Length 19; Pred. No. 1.5e+02;
                                                                         Mismatches
                                                                         Indels
                                                                         <u>,</u>
                                                                                                                                                                                                         G72-targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene
                                                                         0,
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RESULT 222 ADG64562/c

Query Match Best Local S Matches 18

Similarity

0.5%;

Conservative

0

Score 17.4; DB 1; Length 19; Pred. No. 1.5e+02; O; Mismatches 1; Indels

0

Gaps

0

19

6 A;

w c; 0

G; 0 T;

10 U; 0 Other;

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The invention relates to short interfering nucleic acids (siNA) which CC downregulate expression of the human G72 gene by RNA interference. The CC siNAs may or may not comprise ribonucleotides and may be double or single CC stranded. They further comprise sense and antisense regions, or.

CC alternatively are assembled from a sense oligonucleotide and an antisense CC oligonucleotide. Specifically, the siNAs include short interfering RNA CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA CC (shRNA). The siNAs can be unmodified or chemically modified, can contain CC deoxyribonucleotides, and can be chemically mynthesised, expressed from a CC vector or enzymatically synthesised. The invention also relates to kits CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate CC expression of the G72 gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment CC drug screening, diagnosis, therapeutic target identification and cc validation, genetic engineering, pharmacogenomics, studying gene CC drug screening, diagnosis, therapeutic target identification and CC validation, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human G72-targeted. CC double-stranded sina, which is identical to the G72 transcript target.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2002;
11-MAR-2002;
06-JUN-2002;
29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; neuroleptic; pharmacogenomics; gene function analysis; gene mapping; neuroleptic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-FEB-2003; 2003WO-US004397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003070743-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human G72 siNA oligonucleotide SEQ ID NO:8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-DEC-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       schizophrenia; human; G72; target sequence;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNA interference; short interfering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADG64562 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 iomo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; SEQ ID NO 8; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         interfering nucleic acid, useful e.g. for treatment and of schizophrenia, downregulates expression of the G72 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; 2002US-0408378P.
; 2002US-0409293P.
; 2002US-0431105P.
; 2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-0358580P.
2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beigelman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        L, Haeberli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid; siNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene.
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RESULT 224
AAQ57189
ID AAQ571
XX
AC AAQ571
XX
DT 25-MAR
DT 26-JUL
XX
C Enzyma
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AAH19613
ID AAH196
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                                                                                                                                      밁
                                                                                                                                                                                Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                               The present sequence was used to analyse the mRNA expression of mouse interleukin-5 (IL-5) in an example illustrating an invention relating to a gene therapy composition for the prevention of respiratory infections. The composition comprises DNA encoding interferon (IFN)-gamma and may be administered to the patient by intranasal gene transfer. It is useful for treating respiratory viral infections, especially respiratory syncytial virus (RSV). The composition of the invention may be administered to an infant or other immunosuppressed individuals
                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                       New gene therapy composition useful infections, particularly RSV.
  Enzymatic RNA
                        25-MAR-2003
26-JUL-1994
                                                          AAQ57189
                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 8; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2001006951-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      respiratory infection IL-5; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse; IFN-gamma; interferon-gamma; respiratory infection; respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse IL-5 PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH19613
                                                                               AAQ57189 standard; mRNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                               Mohapatra SS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MOHA/) MOHAPATRA S
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (KUMA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (/BEHE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MATS/)
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                                                                                                                                                          556
                                                                                                                                                                                                                                                                                                                                                                                                          2001-389297/41.
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                                                                                                                                                                                 18;
                                                                                                                                      N
                                                                                                                                                                                                                                                                                                                                                                                                                                                      BEHERA A K.
KUMAR M.
                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MATSUSE H
                                                                                                                                                           AGGATGCTTCTGCATTTGA 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTTTAAGAAATGCAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTTTAAGAAATGAAAATG
                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
molecule IL-5 mRNA target sequence
                       (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                               Matsuse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0075588P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00259411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       တ
                                                                                                                                                                                          94.7%;
                                                                                                                                                                                                     0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                               Έ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                               Behera AK,
                                                                               ВP
                                                                                                                                                                                0
                                                                                                                                      20
                                                                                                                                                                                                     Score 17.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 271
                                                                                                                                                                                           Pred.
                                                                                                                                                                                 Mismatches
                                                                                                                                                                               e 17. ,
No. 1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; antiviral; gene therapy; vaccine;
syncytial virus; RSV; interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                    'n
                                                                                                                                                                                                                                                                                                                                                                                   the prophylaxis of respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                Kumar M;
                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                 Indels
                                                                                                                                                                                0,
                                                                                                                                                                                Gaps
                                                                                                                                                                                0
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Homo sapiens Synthetic.

14-MAR-1997;

97WO-AU000162

18-SEP-1997

WO9733990-A1

15-MAR-1996;

96AU-00008691

Human; interleukin-5; IL-5; palindromic regulatory element; inhibition; modulation; asthma; eosinophilia; mutant; ss.

IL-5 promoter mutant palindromic regulatory element, PRE1-3

27-MAR-1998

(first

entry)

AAV01430 standard; DNA; 21

BP.

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밁
                                                        S
RESULT 225
                                                                                  Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                               17-JUL-1992;
07-DEC-1992;
07-DEC-1992;
07-DEC-1992;
                                                                                                                                                       This is an II-5 mRNA target sequence (nucleotide no. 10) of an enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The conc. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of action is higher. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Interleukin-5; specific; cleavage; target RNA; protein; expression;
inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention
psoriasis; asthma; inflammatory diseases; restenosis;
                                                                                                                                     Sequence 17 BP; 6
                                                                                                                                                                                                                                                                                       Enzymatic RNA molecules which cleave mRNA - used to treat or inflammatory, arthritic, stenotic or cardiovascular diseases
                                                                                                                                                                                                                                                  Claim 3; Page 16; 65pp; English.
                                                                                                                                                                                                                                                                          conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-FEB-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W09402595-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cardiovascular
                                                                                                                                                                                                                                                                                      inflammatory,
                                                                                                                                                                                                                                                                                                                            WPI; 1994-048853/06.
                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                            518
                                   H
                                                                                               Similarity
                                                            CTTTGCCAAAGGCAAAC 534
                                                                                                                                                                                                                                                                                                                                                     ΣM,
                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                  Draper
                                                                                                                                                                                                                                                                                                                                                                                                   92US-00916763.
92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              condition; hypertension; arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93WO-US006316
                                                                                                                                     A; 5 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                               0.5%;
                                    17
                                                                                     0
                                                                                                            Score 17;
                                                                                                Pred. No.
                                                                                      Mismatches
                                                                                                            DB 1;
                                                                                                1.4e+02;
                                                                                     0
                                                                                                           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        prevention,
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                                                                                                                                                                                                                           an enzymatic
                                                                                                                                                                                                                                                                                       prevent
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RESULT 226
AAC73663/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is the human interleukin-5 (hII-5) promoter mutant palindromic regulatory element (PREI-3), which inhibits the activity of the hII-5 promoter and therefore II-5 expression. PREI-3 can be used to modulate II-5 activity by acting on the corresponding region of the hII-5 promoter, especially in cases of asthma and eosinophilia or in immunocompromised subjects. PREI-3 specifically inhibits transcription from the II-5 promoter, as no such sequence is present in genes encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 4; Page 14; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene expression, for treating asthma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid sequence that inhibits activity of the interleukin-5 promoter - and proteins that interact with this sequence to modula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-470871/43.
                                                                                                                                                                   26-MAR-1999;
                                                                                                                                                                                           17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                   Mus musculus Synthetic.
                                                                                                                                                                                                                                                                                                                                                                    Murine IL-5
                                                                                                                                                                                                                                                                                                                                                                                            02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAC73663 standard;
                                                                                                                                                                                                                                            WO200058512-A1
                                                                                                                                                                                                                                                                                                                             Mouse; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TVWT-) TVW TELETHON INST CHILD
                                                                                              WPI; 2000-594648/56
                                                                                                                                                                                                                                                                                                      inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                   receptor-alpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              416 ATGCCATTATTAGGCAT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17;
                                                                                                                                             ISIS PHARM INC
                                                        oligonucleotide compound used to treat asthma and in humans modulates interleukin-5 signal transducti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                     Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 6 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                  antisense oligonucleotide ISIS #16989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                        cancer;
                                                                                                                                                                    9908-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mordvinov
                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                   otide; antiasthmatic; asthma; eosinophilic
                                                                                                                    Mckay
                                                                                                                                                                                                                                                                                                        88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                             20
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                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 17;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HEALTH RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             eosinophilia or immune-compromised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.7e+02;
                                                                                                                                                                                                                                                                                                                  immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence to modulate IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                          eosinophilic ion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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The present sequence is an oligonucleotide used for antisense of interleukin-5 (IL-5) signal transduction. Oligonucleotides

modulation were

Example

2; Page 48;

156pp; English.

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RESULT 227
ABXO4317/c
ID ABXO43
XX ABXO43
XX ABXO43
XX MOUSE;
XX MOUSE;
XX MUSE MOUSE;
XX IMMUNC
XX MUSE MOUSE
PN US2002
XX INMUNC
XX IMMUNC
XX IM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         닭
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The invention relates to an antisense compound of 8-30 nucleobases in clerity, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense coligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian cells or tissues, treating a mammalian cells or tissues, treating a mammalian cells or tissues, treating a mammalian or having a disease or condition associated with II-5 signal transduction, II-5 expression or II-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding II-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABX04317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABX04317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   prevent or delay infection, inflammation or tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 10; Page 14; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mouse Interleukin 5 antisense oligonucleotide ISIS 16989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DEAN/)
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KARRAS J G.
MCKAY R.
MANOHARAN M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCGCCAAAAAGTAAGTTCC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00280799.
2000WO-US007318.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     eosinophilic syndrome; asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mckay R,
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Pred. No. 1.
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RESULT 228
ABZ89011/c
        SXS
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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the cinitiation codon, coding region, 5' or a send genomic flanking regions, 5' or and genomic flanking regions, 5' or and all control coding region, 5' or a suthin 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or compassion of the invention and a second active agent comprising an cantiinflammatory steroid and ubiquinone. A composition of the invention cantiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a cuse in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also cor enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of antiinflammatory producing bronchodilation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine of confiction inflammation, lung allergies, or a respiratory disease or condition. CC Note: The sequence data for this patent is not represented in the printed confiction, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 18
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                                                                                                                                                                                                                                                                                                                                                                                           Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABZ89011 standard; DNA;
                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 4253; 872pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-APR-2001; 2001US-0286137P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           an antisense oligonucleotide targetting mouse
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L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;
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Pred. No. 1.7e+02
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Katz E,
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                                                                                                                                                            Query Match
Best Local S
Matches 18
                                                               ABD25241 standard;
AI051839-derived oligonucleotide SEQ ID 4253.
                                                                                                                                                                                                                          ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                  976 TAAGTAAATTTCCTGTTTTA 995
                                                                                                                    20 TAACTAAGTTTCCTGTTTTA 1
                                                                                                                                                              18;
                                                                                                                                                                        Similarity
                                                                                                                                                                                                       20
                                                                                                                                                                                                       BP; 10 A; 2 C; 3
                                                                                                                                                              Conservative
                     (first
                                                                 DNA;
                     entry
                                                                                                                                                                        90.0%;
                                                                 20
                                                                 ВÞ
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                                                                                                                                                                        Score 16.8;
Pred. No. 1
                                                                                                                                                                                                       G; 5 T; 0 U; 0 Other;
                                                                                                                                                               Mismatches
                                                                                                                                                                        DB 1; Length .7e+02;
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Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer. Homo sapiens.

WO200285309-A2

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P

(EPIG-) EPIGENESIS PHARM INC

Miller S, Li Y, Sa Sandrasagra A, L, Shahabuddin S Katz E, Pabalan Ġ Aguilar

2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent. 6

Claim 15; SEQ ID NO 4253; 763pp; English

RESULT 229
ABD25241/c
ID
ABD252XX
ACCOMPANA
AC This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating comprising oligonucleotides, effective for alleviating composition, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, considered in the producing adenosine sensitivity, levels of adenosine (A) or (A) receptors, considered in the constant depletion or hyposecretion, when administered to a mammal. The colligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung alivary or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to

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RESULT 230
ADK79725/c
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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonuclectides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
                                                                                                                                                                                            with Nav1.3, e.g. pain, disorder, or ataxia.
                                                                                                                                                                                                        New antisense compound targeted to a nucleic acid molecule encoding Navl.3, useful for useful for treating a disease or condition associated with Navl.3, e.g. pain, seizure disorder such as childhood seizure
                                                                                                                                                                                                                                                                                                                                                                                                           26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2004016754-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia; diabetic neuropathy; arthritic pain; migraine headache; infantile epilepsy; ataxia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chimeric phosphorothioate oligonucleotide to target Nav1.3 #7059
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADK79725;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                   14-AUG-2002; 2002US-0403416P
                                                                                                                                                                                                                                                                                                                                                                               14-AUG-2003; 2003WO-US025465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      reduce the amount of target polypeptide present in the lungs.
                                                                                                                                                                                                                                                                                                                        (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                   2004-203785/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     976
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Pred. No. 1.7e
0; Mismatches
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The present invention relates to an antisense compound targeted to a nucleic acid molecule encoding Navl.3, where the antisense compound specifically hybridizes with and inhibits the expression of Navl.3. The compound and composition are useful for treating a disease or condition associated with Navl.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralpia, chronic pain, lower back pain, diabetic neuropathy, trigeninal neuropathy, arthritic pain, acute pain, abant from burns, migraine headache, cluster headache, mild-to-moderate headache; seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy; or ataxia. The present sequence represents a chimeric phosphorothioate oligonucleotide with

Query Match Best Local Similarity

0

Mismatches

Indels

0

Gaps

0

Score 16.8; Pred. No. 1

.7e+02

DB 1;

Length

20

20 B₽;

σ A

2 C; 90.0%;

5 G; 7 T;

0 U;

0 Other;

Claim 4;

SEQ

ID NO 7059;

417pp; English.

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RESULT 231
ADK79309/c
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Best Local Similarity
                          The present invention relates to an antisense compound targeted to a nucleic acid molecule encoding Navl.3, where the antisense compound specifically hybridizes with and inhibits the expression of Navl.3. The compound and composition are useful for treating a disease or condition associated with Navl.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, pain from burns, migraine headache, cluster headache, mild-to-moderate headache, seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy; or ataxia. The present sequence represents a chimeric phosphorothicate oligonucleotide with 2°MOS wings and a deoxy gap. Used during the antisense inhibition of human Navl.3 expression, the oligonucleotides are designed to target different regions of the human Navl.3 RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2'MOE wings and a deoxy gap. Used during the antisense inhibition of human Navl.3 expression, the oligonucleotides are designed to target different regions of the human Navl.3 RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic diabetic neuropathy; arthritic pain; migraine headache;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADK79309
                                                                                                                                                                                                                                                                                Claim 4; SEQ ID NO 6643; 417pp; English
                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding Nav1.3, useful for useful for treating a disease or condition associated with Nav1.3, e.g. pain, seizure disorder such as childhood seizure disorder, or ataxia.
                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-203785/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-AUG-2002; 2002US-0403416P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-2003; 2003WO-US025465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6643
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     infantile epilepsy; ataxia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (PHAA)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
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Pred. No. 1
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2021 ACACATTCAATGGAAGCTAT 2040

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XX 23-SEP
XX 23-SEP
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KW IL-5 z
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PN 06-OCT
XX 06-MAB
PR 17-MAR
PR
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                                              The invention relates to an antisense compound that modulates interleukin CC 5 (IL-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a 2'-0-methoxyethyl sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 receptor a expression, or a creeptor a expression, or IL-5 receptor a expression, or IL-5 receptor a expression of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a conditated. The antisense compounds, methods and compositions are CC is modulated. The antisense compounds, methods and compositions are CC oligonucleotide of the invention.
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17-MAR-2000;
07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Murine interleukin-5 (IL-5) DNA antisense
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-479669/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004121376-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-SEP-2004 (first entry)
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KARRAS J G.

MCKAY R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-00280799.
2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interleukin-5 signal transduction, in treating eosinophilic syndrome
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RESULT 233
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Best Local S
Matches 18
                                                          Matches 17;
                                                                        Query Match
Best Local &
                                                                                                                                                        primer A800 and SATG (AAV32486) were used in the method of the invention to determine the prevelance of cDNA clones with a 114 bp deletion in the human retinaldehyde binding protein HRGR1-2 cDNA (AAV32476). The HRGR1-7 cDNA (AAV32477) of clone HRGR1-7, isolated from a human lambda-gt10 retinal library, was found to contain the deleted region which corresponded to the nucleotide sequence of exon 6 (AAV32483) of the human retinaldehyde binding protein gene. The human retinal and all-trans protein HRGR1-2 (AAW48858) binds both 11-cis-retinal and all-trans retinal. The invention claims that molecular aberration of the visual system can be detected in binding sassys by observing any changes in the binding of the retinaldehyde binding protein HRGR1-2 to its chromophores. The retinaldehyde binding protein hrgr1-2 can also be used to raise antibodies, which in turn can be used to detect changes of the protein in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human retinaldehyde binding protein HRGR1-2; retinal pigment epithelium; 11-cis-retinal; all-trans retinal; visual system; binding assay; chromophore; PCR; primer; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                             Human and bovine retin-aldehyde-binding proteins - used to detect aberration(s) of retinal binding in visual excitation systems.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human retinaldehyde binding protein HRGR1-2 cDNA primer
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                                                                                                                  Sequence 20
                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Col 23; 39pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fong HKW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FONG/) FONG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-DEC-1994;
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                              2974 GCAGATCATCTCATTGCC 2991
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                                                                                                                  A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
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Pred. No. 1.7e+02;
0; Mismatches 2
                                                                        Score 16.4; DB 1
Pred. No. 1.7e+02
                                                            Mismatches
                                                                                         DB 1;
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AAZ55851
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                           AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAX94584 - AAX95879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae nucleotides sequences can also be used as immunogenic compositions, especially where the vector directs the expression of a neutralising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                         Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-357842/30.
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04-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX96157 standard; DNA;
                         Homo sapiens
                                                                                                                                                                                 AAZS$851 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chlamydophila pneumoniae.
                                                  Retinaldehyde binding protein; photoreceptor; G protein-couple
                                                                                           Human retinaldehyde binding protein cDNA PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 1804; Disclosure; 1912pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-SEP-1999
                                                                                                                           10-APR-2000
                                                                                                                                                                                                                                                                        2936 TGTAACTAGGTTCCTGCC 2953
                                                                                                                                                                                                                                                         18 TGCAACTAGGTTCCTGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                       BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                    pneumoniae
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98US-0107078P
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                                                    nding protein; rgr gene; all-trans retinal; chromophore; protein-coupled receptor; human; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                            94.4%;
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                                                                                                                                                                                                                                                                                                               Score 16.4; DB 1; Length 20; Pred. No. 1.7e+02; O; Mismatches 1; Indels
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RESULT 236
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to mammalian retinaldehyde binding proteins and nucleotides encoding them. Retinaldehyde binding protein is the first light-absorbing vertebrate protein identified to stably and preferentially bind the all-trans-retinal chromophore. Retinaldehyde binding proteins have distant homology to other G protein-coupled receptors, possessing seven transmembrane domains. The nucleic acid and encoded protein are useful for assaying changes in the structure or the retinaldehyde-binding proteins which would be indicative of a molecular aberration in the retinal pigment epithelium, visual system or brain. The nucleic acid is also useful in antisense therapeutics and in the recombinant expression of retinaldehyde-binding protein. Sequences ARZ55948-Z5584 represent probes or PCR primers used in exemplifications of the invention and in the retinaldehyde-binding protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory; steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-OCT-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human oligonucleotide sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of the invention
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                                                                                                                               24-APR-2001; 2001US-0286137P
                                                                                                                                                                                          23-APR-2002; 2002WO-US013135
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pinding protein for use in antisense therapeutics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (FONG/) FONG
                                                                 (EPIG-) EPIGENESIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ш
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            respiratory disease; ds
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Pred. No. 1.7e+02;
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Li Y,

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Matches 17
                                                                                                                                                                                                                                                                                            Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABD30120 standard; DNA; 20 BP
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                                                                                                                                                                                  WO200285309-A2
                                                                                                                                                                                                                                                                            pulmonary transplantation rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA677534-derived oligonucleotide SEQ ID 9132.
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                                         24-APR-2001; 2001US-0286036P
                                                                                                                                         31-OCT-2002
                                                                                                                                                                                                                                Homo sapiens
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                                                                                      23-APR-2002; 2002WO-US013143
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Query Match Best Local S Matches 17

Similarity

0.5%;

Score 16.4; Pred. No. 1

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DB 1; Length

20

BP; 11 A; 0 C; 0 G; 9

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Search completed: December 14, 2004, 16:05:39
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comprising oligonucleotides, effective for alleviating composition of igonucleotides, effective for alleviating composition, respiratory tract inflammation, allergies and creducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, composition or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating composition of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery composition for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, composition for analysesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung complammation, allergies and/or bronchoconstriction and/or lung complammation, allergies and/or bronchoconstriction, respiratory hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary the reduced adenosine content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system content any unwanted effects due to it
Nyce JW,
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pharmaceutical composition for treating asthma, has antisense oligonuclectide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.
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1 (bases 1 to 5
Edwards, C.A., Ca
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 Cantor, C.R.,
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 Turin, L.M.
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 Fry, K.E
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1 (bases 1 to 50)
Edwards (C.A., Cantor, C.R., Andrews, B.M., Sequence-directed DNA-binding molecules (Patent: US 5578444-A 214 26-NOV-1996, Location/Qualifiers
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                                                                                                  Unclassified.

1 (bases 1 to 50)

1 (bases 1 to 50)

Edwards (C.A., Cantor, C.R., Andrews, B.M. and Turin, L.M.

Screening assay for the detection of DNA-binding molecules

Patent: US 5726014-A 214 10-MAR-1998;

Location/Qualifiers
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                                                                           /organism="unknown"
/mol_type="unassigned
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/mol_type="unassigned
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/mol_type="unassigned
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171456
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105454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 50)
Edwards, C.A., Cantor, C.R., Andrews, B.M.,
Sequence directed DNA binding molecules of
Patent: US 6384208-A 214 07-MAY-2002;
Location/Qualifiers
                   1 (bases 1 to 47)
Nicholson, D.
Method of purification of recombinant human interleukin-5
Patent: US 5681936-A 2 28-OCT-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                              l Similarity
                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 48)
Coffman,R., Yokota,T., Crute,J.J., Lee,F. and Arai,K.-i.
Human pleiotropic immune factor and muteins thereof
Patent: EP 0267779-A2 6 18-MAY-1988;
Location/Qualifiers
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/mol_type="unassigned DNA"
/organism="unknown"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 50;
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BD211601/c
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Best Local Similarity
Matches 46; Conserv
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Best Local Similarity
Matches 43; Conserv
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                                                                                         PF 28-MAY-1999 UP 2000551002
PF 28-MAY-1999 US 60/087306
PI 29-MAY-1998 US 60/087306
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING PC C12115/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395, PC A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475 PC C07K14/54, PC C07K14/56, C07K14/705, C07K14/56, C07K14/705, C07K14/56, C07K14/705, C07K14/705, C07K14/56, C07K14/705, 
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Canine and feline in
and method of using
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77
                                                                         PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 Description of Artificial Sequence: Synthetic Primer P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R. Canine and feline immunoregulatory proteins, n and method of using the same Patent: JP 2002516104-A 107 04-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Method of purification of recombinant Patent: US 5681936-A 3 28-OCT-1997; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 43)
Nicholson, D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
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1 (bases 1 to 42)
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nilarity 97.9%;
Conservative
                                                                                                                                                     A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
C07K14/54,
C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10, PC
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                                               Location/Qualifiers
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organism='Artificial Sequence'.
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Pred. No. 4.4;
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Unclassified.
1 (bases 1 to 42)
1 (bases 1 to 42)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 135 29-OCT-2002;
Location/Qualifiers
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  42
                                                                                                                          Unclassified.

1 (bases 1 to 42)

1 (bases 1 to 42)

Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Caniney IL-13 immunoregulatory proteins and uses thereof Patent: US 6482403-A 135 19-NOV-2002;
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/mol_type="genomic DNA"
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/mol_type="genomic I
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Pred. No. 7.5;
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Method of purification of recombinant Patent: US 5881936-A 4 28-OCT-1997;
Location/Qualifiers
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Sullivan,S.M. and Draper,K.G.
Ribozymes targeted to TNF-.alpha. RN
Patent: US 5616490-A 48 01-APR-1997;
Location/Qualifiers
                               Nicholson, D. Method of purification of recombinant Patent: US 5681936-A 1 28-OCT-1997; Location/Qualifiers
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/mol_type="unassigned
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/mol_type="unassigned
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AR080304
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TREATMENT OF PAPILLOMAVIRUS-ASSOCIATED LESIONS USING INTERLEUKIN-12
PATENT: WO 9629091-A 12 26-SEP-1996;
UNIV CAMBRIDGE TECH (GB)
Other publication AU 5151596 961008.
Location/Qualifiers
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A56954.1
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Roederer, M., Rabin, R., Herzenberg, L.A. and Methods for determining T-cell profiles of
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Sequence 12 from Patent WO9629091.
139778 33 bp
Sequence 51 from patent US 5616490.
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Conservative 0;
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Location/Qualifiers
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/mol_type="unassigned DNA"
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Patent: WO 0250268-A 5 27-JUN-2002;
SUNTORY LTD, SUNTORY
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1 (bases 1 to 30)

Nakazato, H.
                                                Sequence
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1 (bases 1 to 33)
Sullivan, S.M. and Draper, K.G.
Sullivan, S.M. and Draper, K.G.
Ribozymes targeted to TNF.alpha. RNA
Patent: US 5616490-A 51 01-APR-1997;
Location/Qualifiers
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Method of gene enrichment.
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                                                                                              53 from patent US
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Location/Qualifiers
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Unclassified.

Unclassified.

1 (bases 1 to 28)

2 1 (bases 1 to 28)

S Chenchik,A., Jokhadze,G. and Bibilashvilli,R.

Methods of assaying differential expression
AL Patent: US 5994076-A 56 30-NOV-1999;
Location/Qualifiers
            1912
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Sequence 56
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AR196971.1
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Sequence 56
AR089936
AR089936.1
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                                                                                               Unclassified.

Unclassified.

(Chenchik, A., Ookhadze, G. and Bibilashvilli, R. Methods of assaying differential expression Patent: US 6352829-A 56 05-MAR-2002;

Location/Qualifiers
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Unclassified.
1 (bases 1 to 29)
Sullivan,S.M. and Draper,K.G.
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Patent: US 5616490-A 53 01-APR-1997;
Location/Qualifiers
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GGGAATAGGCACACTGGAGAGTCAAACT 1939
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ilarity 100.0%;
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/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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 Guo, H.,
Methods
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AR300439
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                                                   Canis familiaris (dog)
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Chenchik,A., Jokhadze,G. and Bibilashvilli,R. Methods of assaying differential expression Patent: US 6489455-A 56 03-DEC-2002;
                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                  1 (bases 1 to 28)
Guo, H., Lawton, R., Mermer, B. and Aiyappa, A. Methods and compositions concerning canine Patent: US 6537781-A 5 25-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                         Unknown
                                                                                    AX083943.1
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Lawton, R., Mermer, B. and Aiyappa, A.P. and compositions concerning canine in
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2 (bases 1 to 27)
3 (bases 1 to 27)
3 (charmaceurical composition comprising an effective amount of interleukin-10 an anlog and/or an agonist of interleukin-10 patent: WO 9417773-A 6 18-AUG-1994;
3 (cher publication AU 600094 940829)
3 (cher publication AU 600094 940818)
3 (cher publication CA 2155109 940818)
4 (cher publication/Qualifiers)
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Sequence
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                                                                               Sullivan, S.M. and Draper, K.G. Ribozymes targeted to TNF-.alpha. RN Patent: US 5616490-A 41 01-APR-1997;
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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/db_xref="taxon:9615"
                                        organism="unknown"
                                                                   Location/Qualifiers
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                         /mol_type="unassigned DNA"
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100.0%; Pred. No. 41;
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Sequence 9 :
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Patent: WO 0250268-A 6 27-JUN-2002;
SUNTORY LTD, SUNTORY BIOMEDICAL RESEARCH LTD, HIROSHI NAKAZATO
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WO 0250268-A/6.
                                                                                                           Stordeur, P. and Goldman, M.
Method to quantify in vivo rna levels
Patent: EP 1329506-A 9 23-JUL-2003;
Cypro S.A. (BE)
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19-DEC-2000 JP 00P 386025
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   /note="N = 6Fam"
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                                      /note="Oligonucleotide"
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from Patent EP1329506.
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Sequence 55
AR089935
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                                                                                                                                1 (bases 1 to 26)
Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
Methods of assaying differential expression
Patent: US 5994076-A 55 30-NOV-1999;
Location/Qualifiers
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Sequence 9 from Patent WO03060119.
AX805805
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                                           0.8%; Score 26; DB 1;
100.0%; Pred. No. 46;
rative 0; Mismatches
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BD211602/c
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BD211602.1 GI:33021372
BP 2002516104-A/108.
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Sequence 55
AR196970
AR196970.1
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Sequence
AR259124
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Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
Methods of assaying differential expression
Patent: US 6352829-A 55 05-MAR-2002;
Location/Qualifiers
artificial sequences.

1 (bases 1 to 27)
Sim,G., Dreitz,M.J. and Wonderling,R. Canine and feline immunoregulatory proteins, n and method of using the same Patent: JP 2002516104-A 108 04-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 26)
Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
Methods of assaying differential expression
Patent: US 6489455-A 55 03-DEC-2002;
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned
                                                                                                                                                                                                                                                                                                                    /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="unknown"
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100.0%; Pred. No. 46
1ve 0; Mismatches
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100.0%; Pred. No. 46;
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AR241580/c
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DEFINITION
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Best Local Similarity
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OS Artificial Sequence
OS Artificial Sequence
PN JP 2002516104-A/108
PN JP 2002516104-A/108
PN JP 2002516104-A/108
PN JP 2002516102
PF 28-MAY-1999 JP 2000551002
PF 28-MAY-1999 US 60/087306
PI GEKKEB SIM, SHUMIN YANG, MATTHEW J DRBITZ, RAMANI S WONDERLING PC C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,
PC A61K45/00, A61K31/7088, A61K38/00, A61P37/04, C07K14/475, C07K14/535,
PC A61K45/00, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535,
PC C07K14/54,
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AR241580
Unclassified.
1 (bases 1 to 27)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 27)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 136 29-OCT-2002;
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                                                                                                             Sequence 136 from patent AR254536
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                                                         Unknown
                                                                                                 AR254536.1
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Location/Qualifiers
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/mol_type="genomic DNA"
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; Pred. No. 52;
4; Mismatches
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A86923
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Sequence
A39731
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Goldman,M., Velu,T., Abramowicz,D., Bruyns,C., Capel,P.,
Goldman,M., Velu,T., Abramowicz,D., Bruyns,C., Capel,P.,
Delvaux,A., Donckier,V., Gerard,C., Marchant,A., Pradier,O.,
Schandene,L. and Willems,F.
USE OF A PHARMACEUTICAL COMPOSITION COMPRISING AN EFFECTIVE AMOUNT
OF INTERLEUKIN-10, AN ANALOG AND/OR AN AGONIST OF INTERLEUKIN-10
Patent: WO 9417773-A 5 18-AUG-1994;
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                                                                                 1 (bases 1 to 24)

Dolganov,G.

TRANSCRIPTS ENCODING IMMUNOMODULATORY

Patent: WO 9838306-A 14 03-SEP-1998,

GENELABS TECH INC (US)
                                                                                                                                                    unidentified unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Other publication AU 6000894 940829
Other publication CA 2155109 940818
Location/Qualifiers
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A86923
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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                                                                      Location/Qualifiers
                                                                                                                                                                                                            GI:6735707
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100.0%; Pred. No. 51
ive 0; Mismatches
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RESULT 39
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AR079226
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AR048335
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Unknown.
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Dolganov,G. and Novikov,A.
Human RAD50 gene and methods of use thereof
Patent: US 5965427-A 14 12-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                             AR079226
Sequence 14 from
AR079226
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Sequence 14 from
AR048335
                                Sequence 14
AR309657
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Unknown
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                                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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AX643972/c
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Sequence
139774
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Dolganov,G.
Transcripts encoding immunomodulatory
Patent: US 6555666-A 14 29-APR-2003;
Location/Qualifiers
                                                                                                                      Brown, D. and Winkler, M.M.
Competitive population normalization
nucleic acid samples
Patent: WO 02061140-A 10 08-AUG-2002;
                                                                                                                                                                                              synthetic construct synthetic construct
                                                                                                                                                                                                                                 AX643972 23 bp
Sequence 10 from Patent WO02061140.
AX643972
AX643972.1 GI:28551859
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Sullivan, S.M. and Draper, K.G.
Ribozymes targeted to TNF-.alpha. RN
Patent: US 5616490-A 47 01-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified
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                                                                                                             AMBION,
                                                                                                                                                                                   artificial sequences.
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/mol_type="genomic DNA"
                                             /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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/mol_type="unassigned DNA"
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                                   /note="Synthetic Primer"
                                                                                               location/Qualifiers
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100.0%; Pred. No. 57;
vative 0; Mismatches
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SOURCE
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AX003065
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AUTHORS
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AX644889/c
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AX644889
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Eagles, P.A.M. and Zheng, R.Q.
Inhibition of cytokine production
Patent: US 6476214-A 13 05-NOV-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct synthetic construct
                                                                                                                                                                                                                                                                 Unknown
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Competitive amplification of fractionated targets from multiple
                                                                                                                                                                                                                                                                          Unknown.
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llarity 95.8%;
Conservative
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larity 100.0%;
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WO 02061145-A 10 08-AUG-2002;
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10 from Patent WO02061145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon.32630"
                                                                                                                                                                /organism="unknown"
/mol_type="genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Synthetic Primer"
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9: Pred. No. 79;
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Pred. No. 63;
                      27 bp
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BD129707
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              31 CGACCCTGCCAAGGCTTGGCATTT 54
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PC A61P2
                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 27)
Eagles, P.A.M. and Zheng, R.Q.
Inhibition of cytokine production
Patent: JP 200550883-A 13 15-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eagles, P.A. and Zheng, R.Q.
Inhibition of cytokine production
Patent: WO 9937760-A 13 29-JUL-1999;
EAGLES PETER ANTHONY MINTER (GB); ZHENG RICHARD QIHAO
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
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artificial sequences.
1 CGACCCTGCCAAGGCTTGGCAGTT 24
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                                                                                                                                                                                                                            PC A61P29/00,A61P43/00//A61K38/00,C12N15/00,A61K37/02 CC Description of Artificial Sequence: Oligomer containing CC palindromic
                                                                                                                                                                                                                                                                                 PF 20-JAN-1999 JP 2000528668
PR 22-JAN-1998 GB 9801391.5,11-NOV-1998 GB 9824794.3 I
PETER ANTHONY MINTER EAGLES,RICHARD QIHAO ZHENG PC
C12N15/09,A61K9/127,A61K31/711,A61K35/76,A61K48/00,A61P11/06,
                                                                                                                                                                                                                                                                                                                                       BTG INTERNATIONAL LTD
OS Artificial Sequence
PN JP 2002500883-A/13
PD 15-JAN-2002
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Key Location/
                                                    Conservative
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                                                                                                                                                         /organism='Artificial
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Oligomer containing palindromic
                                                                                                    /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Location/Qualifiers
                                                              Score 22.4;
Pred. No. 79;
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RESULT 46 AR080303

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HOSOKAWA,T. and Akitaya,T.
PRIMER FOR DETECTING AND MEASURING SP
PATENT: JP 1995123984-A 16 16-MAY-199
HITACHI CHEM CO LTD
OS
NONE
OC Artificial sequences.
PN JP 1995123984-A/16
PN JP 1993275852
PF 05-NOV-1993 JP 1993275852
PF 05-NOV-1993 JP 1993275852
PF CC12N15/09,C12Q1/68;
CC Strandedness: Single;
CC topology: Linear;
FH Key
FH Key
FH Key
FT Source
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FT Source
/organism='Artif
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AR080303
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JP 1995123984-A/16.
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1 (bases 1 to 22)

Roederer, M., Rabin, R., Herzenberg, L.A. and Herzenberg, L.A. Methods for determining T-cell profiles of immunocompromised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Primer for detecting and E09217
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Location/Qualifiers
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                                                                    Similarity
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GAAATTCCCACAAGTGCATTGG
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JP 1955123984-A/16

16-MAY-1995

05-NOV-1993 JP 1993275852

HOSOKAWA TOSHIAKI, AKITAYA TATSUO

C12N15/09,C12Q1/68;
                                                   0.7%; Score 22; DB larity 100.0%; Pred. No. 70 Conservative 0; Mismatches
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/organism='Artificial sequences'
/note='complementary to No.619-No.640 of FT
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                                                                                                          /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                     Location/Qualifiers
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/mol_type="unassigned DNA"
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100.0%; Pred. No. 70
tive 0; Mismatches
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RESULT 48

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                                                                                                                                                                                                                                                  Sequence
I39767
                                                                                                                                     Unclassified.

1 (bases 1 to 22)
Sullivan, S.M. and Draper, K.G.
Ribozymes targeted to TNF-.alpha. RN
Ribozymes targeted to TNF-.alpha. RN
Patent: US 5616490-A 40 01-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 22)
HOBOKAWA, T. and Akitaya, T.
PRIMER FOR DETECTING AND MEASURING SPECIFIC MESSENGER
Patent: JP 19951233984-A 17 16-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E09218.1 GI:22025844
JP 1995123984-A/17.
unidentified
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Primer for detecting and
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              CGTTTCAGAGCCATGAGGATGC 562
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JP 1995123984-A/17
16-MAX-1995
05-NOV-1993 JP 1993275852
HOSOKAWA TOSHIAKI, AKITAYA TATSUO
C12N15/09,C12Q1/68;
strandedness: Single;
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                                           0.7%; Score 22; DB.larity 100.0%; Pred. No. 70 Conservative 0; Mismatches
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/organism='Artificial sequences'
/note='complementary to No.2139-No.2160 of FT
                                                                                                                                                                                                                                                             40 from patent US
                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                       /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                            Location/Qualifiers
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139771
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TREAYMENT OF PAPILLOWAVIRUS-ASSOCIATED
PATENT: WO 9629091-A 11 26-SEP-1996;
UNIV CAMBRIDGE TECH (GB)
Other publication AU 5151596 961008.
Location/Qualifiers
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Sequence 11 from Patent W09629091
A56953
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Sullivan,S.M. and Draper,K.G.
Ribozymes targeted to TNF-.alpha. RNA
Patent: US 5616490-A 44 01-APR-1997;
Location/Qualifiers
         Dolganov, G.
TRANSCRIPTS ENCODING IMMUNOMODULATORY POLYPEPTIDES
Patent: WO 9838306-A 15 03-SEP-1998;
                                                                     unidentified unidentified
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 GENELABS
                                            unclassified.
1 (bases 1 to 21)
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TECH INC (US)
                                                                                                                             15 from Patent W09838306.
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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AR048336/c
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AR079227/c
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Sequence
AR048336
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Dolganov,G. and Novikov,A.
Human RAD50 gene and methods of use thereof
Patent: US 5965427-A 15 12-CCT-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                        Dolganov.G.
Method of identifying activated T-cells
Patent: US 5821091-A 15 13-OCT-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
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from patent US 5965427.
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AX643971
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Sequence 22
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Sequence 9 from Patent WO02061140.
AX643971
AX643971.1 GI:28551855
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Sequence 15 from patent US
AR309658
AR309658.1 GI:31701735
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Competitive population normalization
nucleic acid samples
Patent: WO 02061140-A 9 08-AUG-2002;
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Brown, D. and Winkler, M.M.
Competitive population normalization nucleic acid samples
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AX644902
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Patent: WO 02061145-A 23 08-AUG-2002;
                                                                                                          Winkler,M.M. and Brown,D.
Competitive amplification of fractionated targets from multiple
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Sequence 8 from Patent W003060119.
AX805804
AX805804.1 GI:38522715
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Sequence 8 from Patent EP1329506.
AX801572
AX801572.1 GI:38500544
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/db_xref="taxon:32630"
/noTe="Oligonucleotide"
                                                                                                                                                  /note="Oligonucleotide"
                                                                                                                                                            /organism="synthetic construct"
/mol_type="unassigned DNA"
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Pred. No. 78;
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AR136238/c
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AR136237/c
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AR136237
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Sequence
AR136238
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 39 24-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unknown.
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Dean,N., Karras,J.G. and McKay,R.
Dean,E. modulation of interleukin-5 signal transduction
Patent: US 6136603-A 40 24-OCT-2000;
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                                             1 (bases 1 to 20)
Dean, N., Karras, J.G. and McKay, R.
Dean, N., Karras, J.G. and McKay, R.
Antieense modulation of interleukin-5
Patent: US 6136603-A 41 24-OCT-2000;
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/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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/ 100.0%; Pre
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AR136241/c
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AR136240/c
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AR136240
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AR136239
                              Sequence
AR136241
                                                                                                                                                                                                                                1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 43_24-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 42 24-OCT-2000;
Location/Qualifiers
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larity 100.0%; Pred. No. 86;
Conservative 0; Mismatches
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/mol_type="unassigned DNA"
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AR136242/c
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928 ACATAAAAATGTAAGTTAAA
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AR136243 .
AR136243.1
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Sequence
AR136242
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1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and McKay,R.

Antisense modulation of interleukin-5

Patent: US 6136603-A 44 24-OCT-2000;

Location/Qualifiers
                                                                                                                    1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 46 24-OCT-2000;
Location/Qualifiers
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 45 24-OCT-2000;
Location/Qualifiers
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Similarity 100.0%; Pred. No. 86
20; Conservative 0; Mismatches
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Similarity 100.0%;
20; Conservative (
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/mol_type="unassigned DNA"
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AR136244/c
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AR136244
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Sequence
AR136246
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Dean, N. M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 48 24-OCT-2000;
Location/Qualifiers
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AR136245
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 47 24-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
1 (bases 1 to 20)
Dean, N., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 49 24-OCT-2000;
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/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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ive 0; Mismatches
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AR136248/c
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AR136247
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 50 24-OCT-2000;
                                                                                                                                                        1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 51 24-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                         Unknown.
Unclassified.
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AR136249
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/mol_type="unassigned
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/mol_type="unassigned DNA"
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AR136251/c
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Sequence 54:
AR136251
AR136251.1
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Sequence 53
AR136250
AR136250.1
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AR136249
AR136249.
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5 signal
Patent: US 6136603-A.53 24-CCT-2000;
Location/Qualifiers
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Unknown.
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5 signal
Patent: US 6136603-A 52 24-CCT-2000;
Location/Qualifiers
                                                                   1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5 signal
Patent: US 6136603-A 54_24-OCT-2000;
                                                                                                                  Unclassified.
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/mol_type="unassigno
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/mol_type="unassigned DNA"
                                                          Location/Qualifiers
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100.0%; Pred. No.
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AR136253/c
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AR136254/c
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 56 24-OCT-2000;
Location/Qualifiers
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 55 24-OCT-2000;
Location/Qualifiers
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from patent US 6136603.
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AR136256/c
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AR136255/c
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 57 24-OCT-2000;
Location/Qualifiers
                                                                                                                      Dean,N.M., Karras,J.G. and McKay,R. Dean,N.M., Karras,J.G. and McKay,R. Antisense modulation of interleukin-5 Patent: US 6136603-A 59 24-OCT-2000; Location/Qualifiers
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Sequence 59 from patent
AR136256
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 58 24-OCT-2000;
Location/Qualifiers
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AR136257/c
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AR136259/c
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AR136257
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Sequence
AR136258
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 60 24-OCT-2000;
Location/Qualifiers
1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 62 24-OCT-2000;
Location/Qualifiers
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 61 24-OCT-2000;
Location/Qualifiers
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RESULT 88
AR136262/c
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AR136260/c
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 64 24-OCT-2000;
Location/Qualifiers
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Dean,N.M., Karras,J.G. and McKay,R.

Antisense modulation of interleukin-5

Patent: US 6136603-A 63 24-OCT-2000;

Location/Qualifiers
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/mol_type="unassigned DNA"
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/organism="unknown"
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AR136264/c
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AR136263/c
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Dean, N.M., Karras, J.G. and McKay, R.

Antisense modulation of interleukin-5

Patent: US 6136603-A 65 24-OCT-2000;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
AR136263
                                                               Unclassified.
1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 67 24-OCT-2000,
Location/Qualifiers
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                                                                                                                                  Unknown
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Dean, N., Karras, J.G. and McKay, R.
Antieense modulation of interleukin-5
Patent: US 6136603-A 66 24-OCT-2000;
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AR136262.1
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                             /mol_type="unassigned
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/mol_type="unassigned
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AR136265/c
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AR136267/c
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                                         AR136267
Sequence 70
AR136267
AR136267.1
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 69 24-OCT-2000;
Location/Qualifiers
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Sequence 69 from patent
AR136266
AR136266.1 GI:14476938
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 68 24-OCT-2000;
Location/Qualifiers
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Sequence 68 from patent
AR136265
AR136265.1 GI:14476937
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/mol_type="unassigned DNA"
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AR136268/c
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1 (bases 1 to 20)

1 (bases 1 to 20)

2 (bases 1 to 20)

2 (bases 1 to 20)

2 (bases 1 to 20)

3 (bases 1 to 20)

4 (bases 1 to 20)

5 (bases 1 to 20)

5 (bases 1 to 20)

6 (bases 1 to 20)

6 (bases 1 to 20)

7 (2002539846-A 39 26-NOV-2002;

8 (bases 26 NOV-2002;

8 (bases 26 NOV-2002;

1 SIS PHARMACEUTICALS INC

9 (color 10 to 1
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20
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Sequence
AR136268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                l (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 70 24-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l (bases 1 to 20)
Dean,N., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 71 24-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense modulation of BD247691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
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                      A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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  source
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
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/mol_type="unassigned
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; Pred. No.
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Pred. No.
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86;
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signal transduction
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DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
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BD247693/c
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AUTHORS
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BD247692/c
                                                                                                                                                                                                                            ACCESSION
VERSION
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                                                                                         REFERENCE
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                                                                                                                                                                         SOURCE
                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                            Snoo
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Best Local S
Matches 20
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JOURNAL
                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local Similarity
                                                                                                                                           ORGANISM
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artificial sequences.

1 (bases 1 to 20)

12 1 (bases 1 to 20)

13 Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-2002;

181S PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/40

PD 26-NOV-2002
PP 17-MAR-2000
PD 26-NOV-2002
PP 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR 26-MAR-1999 US 09/280799
PR 26-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR 26-MA
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synthetic construct
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and Mckay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 41 26-NOV-2002;
                                                                                                                                                                                          BD247693 20 bp DNA linear PAT 17
Antisense modulation of interleukin-5 signal transduction.
BD247693.1 GI:33057463
JP 2002539846-A/41.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism='Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Location/Qualifiers
1. ^^
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Pred. No. 86;
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86
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
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                                                                                                                                                                                                                                                                                                       PAT 17-JUL-2003
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REFERENCE
AUTHORS
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SOURCE
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BD247694/c
LOCUS
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ACCESSION
VERSION
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                                                     Query Match
Best Local S
Matches 20
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
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                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bource
                                                                                                                                                                                                                                                                     artificial sequences.

artificial sequences.

I (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 42 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/42

PP 1000539846-A/42

PP 2002539846-A/42

PP 17-MAR-2000 JP 2000608790

PR 26-MAR-1299 US 09/280799

PR 26-MAR-1299 US 09/280799

PR 26-MAR-1299 US 09/280799

PR 26-MAR-1299 US 09/280799

PR 26-MAR-1999 US 09/280799
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                                                                                                                                                                                       synthetic construct synthetic construct
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Antisense modulation of
BD247694
BD247694.1 GI:33057464
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                                                                     Similarity
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                   GCCAATGAGGTAATTTTCTT 707
                                                                                                                                                                                              A61P43/00,
A61P43/00,C12N5/02,C12N15/00
A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Description of Location/Qualifiers
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26-MAR-1999 US 00/280799
NICHDAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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JP 2002539846-A/41
26-NOV-2002
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larity 100.0%; I
Conservative 0;
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Description of Artificial Sec
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                          /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; Pred. No. 86,
tive 0; Mismatches
                                                   Score 20; DB; Pred. No. 86; 0; Mismatches
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Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 43 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN 17-WAR-2002
PF 17-WAR-2002
PR 26-MAR-1999 US 09/280799
PI NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
PC C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P3/00,
PC A61P43/00, C12N5/02, C12N15/00
PC A61P43/00, A61P43/
                                                                                                                                                                                                                                                       artificial sequences.

1 (Dases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 44 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/44

PD 2002539846-A/44

PD 26-NOV-2002

PP 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PI NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
                                                                                    857 TGAATGCTGGTGTGCTGTAA 876
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Antisense modulation of interleukin-5 signal transduction.
ED247695
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JP 2002539846-A/43.
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1 (bases 1 to 20)
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00, A61P43/00,
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                                                                                                                                             Description of Artificial Sequence:Synthetic
Key Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
organism="synthetic construct"
                                                     ocation/Qualifiers
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86;
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BD247698/c
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AUTHORS
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BD247697/c
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                                 synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 20)
1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 46 26-NOV-2002;
ISIS PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             artificial sequences.

1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A, 45 26-NOV-2002;
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S Rd
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                                                                                                                                                                     Antisense modulation of interleukin-5 signal transduction BD247698
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17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
         Artificial Sequence JP 2002539846-A/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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/db_xref="taxon:32630"
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/db_xref="taxon:32630"
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100.0%; Pred. No. 86,
tive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                   Score 20; ; Pred. No.
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BD247700
Antisense modulation
BD247700
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17-MAR-2000 JP 2000608790
16-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
Cl2N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic Location/Qualifiers
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26-MAR-1999 US 09/280799
NICHCLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                   /organism="synthetic construct"
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/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism='Artificial Sequence'
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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                                                                                                                                                                                                                                                                                                                                0.6%;
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                  of interleukin-5 signal transduction.
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                                                                                                                                                                                                                                                                                                        Score 20;
Pred. No.
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                                                                                                                                                                                                                                                                                 Mismatches
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                                               g
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80
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                                               linear
                                             PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                 0
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DEFINITION
ACCESSION
VERSION
KEYWORDS
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KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
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BD247701/c
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AUTHORS
TITLE
JOURNAL
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                                                                                   FEATURES
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Query Match
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                                                                                                                                                                                                                               synthetic construct

SM synthetic construct

artificial sequences.

E 1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 49 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/49
PD 26-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        artificial sequences.

1 (bases 1 to 20)

E 1 (bases 1 to 20)

S Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 48 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/48
PD 26-NOV-2002

PF 17-MAR-2000 JP 200608790
PF 26-MAR-1999 US 09/280799
PR 26-MAR-1999 US 09/280799
PR 101CHOLAS M DEAM,JAMES G KARRAS, ROBERT MCKAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1161 TTCCCAAAGAGCATCGTGTC 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
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                                                                                               Antisense modulation of interleukin-5 BD247701
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A61P43/00,C12N5/02,C12N15/00
A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Description of Acception/Qualifiers
                                                                                                                    A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Location/Qualifiers
                                                                                                                                                                             17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
                                                                              /organism='Artificial Sequence'
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                                         /organism="synthetic construct"
/mol_type="genomic DNA"
                            B
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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                           _xref="taxon:32630"
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Pred. No.
 Score
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 20;
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86;
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Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
 20;
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RESULT 106
BD247702/c
LOCUS
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KEYWORDS
SOURCE
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                                                                                                                                                                              REFERENCE
AUTHORS
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ACCESSION
VERSION
KEYWORDS
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BD247703/c
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                                                                                                              COMMENT
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity Matches 20; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
synthetic construct
synthetic construct
synthetic construct
artificial sequences.

E 1 (bases 1 to 20)

E 1 (bases 1 to 20)

S Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 202539846-A 51 26-NOV-2002;

ISIS PHARMACEUTICALS INC
Artificial Sequence
ON JP 2002539846-A/51
PD 26-NOV-2002
PT 200539846-A/51
PD 26-NOV-2002
PT 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR 17-MAR-2000 JP 2000608790
PR 17-MAR-2000 JP 2000608790
PR 17-MAR-2000 JP 2000608790
PR 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR 26-MAR-1999 US 09/280799
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Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 50 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/50

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NOV-2002

PF 17-MAR-2000 JP 2000608790

PF 17-MAR-2000 JS 09/280799

PR 26-MR-1999 US 09/280799
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synthetic construct
artificial sequences.
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Antisense modulation of interleukin-5 signal transduction.
BD247702
BD247702.1 GI:33057472
JP 2002539846-A/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20;
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BD247703.
BD247703.1 GI:33057473
JP 2002539846-A/51.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type='yearem__
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="synthetic construct"
/mol_type="genomic DNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.6%;
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0; Mismatches
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; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
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VERSION
KEYWORDS
SOURCE
ORGANISM
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BD247704/c
  KEYWORDS
SOURCE
                                         DEFINITION
ACCESSION
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                                                                                 RESULT 109
BD247705/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                 artificial sequences.

1 (Dases 1 to 20)

1 (Dases 1 to 20)

2 Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 52 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/52

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NOV-2002

PD 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PI NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY

PC C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
                                                                                                                                                        1884 ACCAACTGTGCACTGAAGAA 1903
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BD247705 20 bp DN7
Antisense modulation of interleukin-5
BD247705
BD247705.1 GI:33057475
JP 2002539846-A/53.
synthetic construct
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AntiBense modulation of interleukin-5 signal transduction.
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A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Location/Qualifiers
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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Location/Qualifiers
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/mol_type="genomic DNA"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; Pred. No. 86
tive 0; Mismatches
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BD247706/c
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1 (bases 1 to 20)

Bean, M.M., Karras, J.G. and Mckay, R.

TITLE

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 54 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS ATTICIAL Sequence

PN JP 2002539846-A/54

PD 26-NOV-2002

PF 17-NAR-2000 JP 2000608790

PF 26-MAR-1999 US 09/280799

PC 12N15/09, A61X31/711, A61X48/00, A61P29/00, A61P35/00,

PC A61P43/00, C12N5/02, C12N15/00

PC A61P43/00, C12N5/02, C12N15/00

PC A61P43/00, C12N5/02, C12N15/00

PC DESCRIPTION OF ARTIFICIAL Sequence:Sympthem.

FH Key

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1 (bases 1 to 20)

RS Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 53 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/53

PD 26-NOV-2002

PF 17-MAR-2000 JP 2000608790

PF 17-MAR-2000 JP 2000608790

PF 17-MAR-2000 JP 2000608790

PF 17-MAR-2000 JP 2000608790

PC 12N15/09, A61X31/711, A61X48/00, A61P11/06, A61P29/00, A61P35/00,

PC A61P43/00, C12N5/02, C12N15/00

CC Description of Artificial Sequence: Synthetic
FH Key

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1988 AAGAAATACATTGACGGCCA 2007
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Antisense modulation of i
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BD247706.1 GI:33057476
JP 2002539846-A/54.
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
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86;
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BD247708/c
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1 (bases 1 to 20)

Dan, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction
Pateent: JP 2002539846-A 55 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/55
                                                                                                                                                                                                                            BD247708 20 bp DNA Antisense modulation of interleukin-5 BD247708 BD247708.1 GI:33957478
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  synthetic construct
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Antisense modulation of
BD247707
BD247707.1 GI:33057477
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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          Description of Artificial
                     A61P43/00, C12N5/02, C12N15/00
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/db_xref="taxon:32630"
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/mol_type="genomic DNA"
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Live 0; Mismatches
Artificial Sequence:Synthetic Location/Qualifiers
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,A61P11/06,A61P29/00,A61P35/00,
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BD247709/c
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Antisense modulation of i
BD247710 GI:33057480
BD240710.1 GI:33057480
JP 200539846-A/58.
Synthetic construct
Synthetic construct
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synthetic construct
artificial sequences.

1 (bases 1 to 20)

Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 57 26-NOV-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/57
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artificial sequences.

1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction
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JP 2002539846-A/57.
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26-NOV-2002
17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Location/Qualifiers
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100.0%; Pred. No.
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100.0%; Pred. No. 86;
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BD247711/c
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                         2186 AATGAACACCGAGTGGATAA 2205
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1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.
Dean,N.M., Karras,J.G. and mckay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 59 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/59

PD 26-NOV-2002
                                                                                                                                                                    synthetic construct synthetic construct
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BD247711.1 GI:33057481
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                                                               Similarity
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A61P43/00,C12N5/02,C12N15/00
Ac1P43/00,C12N5/02,C12N15/00
Ac1P43/00,C12N5/02,C12N15/00
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Description of Artificial Sequence:Synthetic Location/Qualifiers
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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                                                                                                                                                                                                                                             NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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26-MAR-1999 US 09/280799
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/db_xref="taxon:32630"
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                                             100.0%; P1
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100.0%; Pred. No.
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100.0%; Pred. No. 86
ive 0; Mismatches
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SOURCE
ORGANISM
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ACCESSION
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BD247713/c
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Best Local &
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artificial sequences.

CE 1 (bases 1 to 20)

RS Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 60

S Artificial Sequence
PN JP 2002539846-A/60

PD 26-NOV-2002
PF 17-MAR-2000 JP 2000608790
PF 17-MAR-2000 JP 2000608799
PR 26-MAR-1999 US 09/280799
PR 16-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00, PC A61P43/00, C12N5/02, C12N15/00
CC Description of Artificial Sequence:Synthetic
FH Key 1.20

FT source //organism='Artificial Sequence'.
                                synthetic construct

SM Synthetic construct

artificial sequences.

E 1 (bases 1 to 20)

I Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A61

Patent: JP 2002539846-A161

POS Artificial Sequence
PN JP 2002539846-A/61

PP 26-NOV-2002

PP 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-300, JAMES G KARRAS, ROBERT MCKAY

PI NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY

PC A61P43/00, C12N5/02, C12N15/00

PC A61P43/00, C12N5/02, C12N15/00

PC A61P43/00, C12N5/02, C12N15/00

PC A61P43/00, C12N5/02, C12N15/00

PC MG1P43/00, C12N5/02, C12N15/00

PT SOURCE //Capiter Artificial Sequence'.

PT SOURCE //Capiter Artificial Sequence'.
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BD247713
BD247713 GI:33057483
JP 2002539846-A/61.
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Antisense modulation of interleukin-5 signal transduction
BD247712
BD247712.1 GI:33057482
JP 2002539846-A/60.
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
Location/Qualifiers
1. .20
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Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; Pred. No.
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BD247715/c
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ISM synthetic construct

artificial sequences.

CE 1 (bases 1 to 20)

RS Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Patent: JP 2002539846-A 62 26-NOV-2002;

ISIS PHARMACEUTICALS INC

SARTIFICIAL Sequence
PN JP 2002539846-A/62

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NAR-1209 US 09/280799

PR 26-MAR-1299 US 09/280799

PR 26-MAR-1209 US 09/280799

PR 26-MAR-2000 A61R31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
JP 2002539846-A/63.

synthetic construct
SM synthetic construct
SM synthetic construct
Entificial sequences.

E 1 (bases 1 to 20)
S Dean,N.M., Karras,J.G. and Mckay,R.
Deanse modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 63 26-NOV-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/63
                                                                                                                                                                                                                                                                                                                                               2352 CATACTGACACTTTGCCAGA 2371
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                                                                                                                                                                                     BD247715 20 bp DNA linear PAT 17 Antienne modulation of interleukin-5 signal transduction. BD247715 BD247715.1 GI:33057485
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Antisense modulation of interleukin-5
BD247714
BD247714.1 GI:33057484
JP 2002539846-A/62.
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Description of Artificial Sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism='Artificial Sequence'.
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="synthetic construct"

mol_type="genomic DNA"
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100.0%; Pred. No.
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100.0%; Pred. No.
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RESULT 121
BD247717/c
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ACCESSION
VERSION
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SOURCE
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BD247716/c
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     DEFINITION
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TITLE
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Best Local S
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Elicial sequences:
artificial sequences:
Dean, N. M., Karras, J.G. and Mckay, R.
Dean, N. M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 64 26-NOV-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A)64
PD 26-NOV-2002
PF 17-MAR-2000 JP 2000608790
PF 26-MOV-2002
PF 17-MAR-2000 JP 2009608799
PR 26-MAR-1999 US 09/280799
PR 26-MAR-1999 US 09/280799
PR 26-MAR-3090 JP 2009608790
PR 26-MAR-3000 JP 
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BD247717 20 bp DNA linear PAT 17 Antisense modulation of interleukin-5 signal transduction.
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                                                                                                                                                                                                                                                                                           Similarity
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17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                                                                                                                                                Conservative
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26-MAR-1999 US 09/280799
NICHOLAS UDEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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A61P43/00,C12N5/02,C12N15/00
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                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; Pred. No.
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100.0%; Pred. No.
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                             PAT 17-JUL-2003
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ACCESSION
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AUTHORS
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AUTHORS
TITLE
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VERSION
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BD247718/c
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Best Local
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artificial sequences.

1 (bases 1 to 20)

2 1 (bases 1 to 20)

2 1 (bases 1 to 20)

3 Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-5 signal
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synthetic construct
artificial sequences.

1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 66 26-NOV-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
OS Artificial Sequence
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JP 2002539846-A/65.
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A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
                                                                                                                                                                                                                                                                                      17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                         JP 2002539846-A/66
26-NOV-2002
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Location/Qualifiers
                                                                                                    /organism='Artificial Sequence'
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/mol_type="genomic DNA"
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Pred. No.
                                                                                                                                                                                        Location/Qualifiers
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86;
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REFERENCE
AUTHORS
TITLE
JOURNAL
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BD247720/c
LOCUS
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BD247719/c
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Matches 20
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Best Local Similarity
Matches 20; Conserv
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JOURNAL
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synthetic construct

synthetic construct

artificial sequences.

CE 1 (bases 1 to 20)

RS Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 68 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/68

PD 26-NOV-2002

PF 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PI NICHOLAS M DEAN,JAMES G KARDON C TOWNS TO THE TOWNS TOW
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synthetic construct

artificial sequences.

El (bases 1 to 20)

RS Dean,N.M., Karras J.G. and Mckay,R.

Dean,N.M., Karras J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 200253946-A 67 26-NOV-2002;

ISIS PHARMACEUTICALS INC

S JP 200253946-A/67

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NOV-2002

PP 17-MAR-2000 JP 200668790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 200668790

PR 26-MAR-2000 JP 200668790

PR 26-MAR-2090 US 09/280799

PR 26-MAR-2000 US 09/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense modulation of interleukin-5 signal transduction BD247720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD247720.1 GI:33057490 JP 2002539846-A/68.
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llarity 100.0%;
Conservative (
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; Pre
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86;
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LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE

BD247722

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signal

PAT 17-JUL-2003

Antisense modulation of interleukin-5 BD247722 BD247722.1 GI:33057492 JP 2002539846-A/70.

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REFERENCE
AUTHORS
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SOURCE
ORGANISM
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ACCESSION
VERSION
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BD247721/c
RESULT 126
BD247722/c
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Best Local S
Matches 20
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Matches
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                                                                                                                                  Local
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artificial sequences.

1 (bases 1 to 20)

E 1 (bases 1 to 20)

B Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Carras,J.G. and Mckay,R.

Antiense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 69 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/69

PD 26-NOV-2002

PD 26-NOV-2002

PD 26-NOV-2002

PD 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PI NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY

PC C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
                                                                                    1873 CCTCATTTAGCACCAACTGT 1892
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BD247721
BD247721.1 GI:33057491
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                                                                                                                                   Similarity
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A61P43/00, C12N5/02, C12N15/00
Description of Artificial Sequence:Synthetic
Location/Qualifiers
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A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Key Location/Qualifiers
                                                                                                                     Conservative
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                                                                                                                                                                        /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                               /organism='Artificial
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon;32630"
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                                                                                                                    ; Score 20; DB
; Pred. No. 86;
0; Mismatches
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AUTHORS
TITLE
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ORGANISM
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BD247723/c
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ACCESSION
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El (bases 1 to 20)
El (bases 1 to 20)
IS Dean, N.M., Karras, J.G. and Mckay, R.
Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 70 26-NOV-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/70
PP 26-NOV-2002
PP 17-MAR-2000 JP 2000608790
PP 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PI NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
PI NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
PC A61P43/00, C12N5/02, C12N15/00
CC A61P43/00, C12N5/02, C12N15/00
CC Description of Artificial Sequence:Synthetic
FH Key
FT SOURCE //Cranism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                       artificial sequences.

1 (bases 1 to 20)

2 1 (bases 1 to 20)

3 1 (bases 1 to 20)

3 2 Dean, N.M., Karras, J.G. and Mckay, R.

Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 71 26-NOV-2002;

ISIS PHARWACEUTICALS INC

S Artificial Sequence
PN JP 2002539846-A/71

PD 26-NOV-2002

PP 17-NAR-2000 JP 2000608790

PP 17-NAR-2000 JP 200608790

PR 26-MAR-1999 US 09/280799
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20 CGGCCAAAAAGTAAGTTACA 1
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BD247723
BD247723.1 GI:33057493
JP 2002539846-A/71.
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26-MAR-1999 US 009/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
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100.0%; Pred. No. 86;
tive 0; Mismatches
0.6%; Score 20; DB
100.0%; Pred. No. 86;
tive 0; Mismatches
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Sequence 4 from I
AR300438
AR300438.1 GI:31
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AX801571
AX801571.1 GI:38500543
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                                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
artificial sequences.
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Sequence 7 from Patent W003060119.
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/db_xref="taxon:32630"
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100.0%; Pred. No. 86
tive 0; Mismatches
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SOURCE
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AR136212/c
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AX083942/c
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Sequence 15
AR136212
AR136212.1
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                             1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 15 24-OCT-2000;
Location/Qualifiers
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1 (bases 1 to 22)
Guo,H., Lawton,R., Mermer,B. and Alyappa,A.P.
Methods and compositions concerning canine in
Patent: US 6537781_A 4 25-MAR-2003;
                                                                                                                                                                                                                                                                                                                                  l Similarity
20; Conserv
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Sequence 4 from Patent WO0111049.
AX083942 GI:13185504
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Canis familiaris (dog)
Canis familiaris
                                                                                                          Unknown.
Unclassified.
                                                                                                                                        Unknown.
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
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                                                                                                                                                                  GI:14476884
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Pred. No. 1.1e+02;
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BD247667/c
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AR136272/c
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AR136269/c
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        BD247667
Antisense modulation of i
BD247667
BD247667.1 GI:33057437
JP 2002539846-A/15.
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AR136272
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 72 24-OCT-2000;
Location/Qualifiers
                                                                                                                                                 19;
                                                                                                                                                                                                                                   Unclassified.
1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 75 24-OCT-2000;
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larity 95.0%;
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Licial sequences.

(bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction patent: JP 2002539846-A 15 26-NOV-2002;

ISIS PHARMACEUTICALS INC

COMMENT

OS Artificial Sequence
PN JP 2002539846-A/15
PD 26-NOV-2002
PF 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PI NICHOLAS M DEAN,JAMES G KAPF
PC C12N15/09,A61X31/711,AFF
PC A61P43/00,
PC A61P43/00,C12NF
PC Description
FH Key
FT BC
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SOURCE
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BD247724/c
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TITLE
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                                                                                                                                                                                                source
                                                                                                                                                                                                                                     CE 1 (bases 1 to 20)

CE 1 (bases 1 to 20)

RS Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

AL Patent: JP 2002539846-A 72 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence

PN JP 2002539846-A/72

PD 26-NOV-2002

PP 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-3090 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-3090 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-2000 J
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|||||||||||||||||||
| 20 TAAAGAAATACATTGACCGC 1
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  0.6%;
ilarity 95.0%;
Conservative
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
CI2N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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                                                                                                          /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Pred. No. 1.1e+02;
0; Mismatches 1;
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  Score 18.4; D
Pred. No. 1.1e
0; Mismatches
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                         1.1e+02;
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ORGANISM
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AR300437
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BD247727/c
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TITLE
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635 CATTGGTGAAAGAGACCTTG
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Methods
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1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 75 26-NOV-2002;

ISIS PHARMACRUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/75

PD 26-NOV-2002
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Sequence 3 from patent US
AR300437
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Antisense modulation of
BD247727
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                                                                                                                                                                                                                                                                                Patent:
                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
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                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
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                                                                                                    Similarity
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o,H., Lawton,R., Mermer,B. and Aiyappa,A.
thods and compositions concerning canine
tent: US 6537781-A 3 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Location/Qualifiers
                                                                                                                                                                              /organism="unknown"
/mol_type="genomic
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95.0%;
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                                                                                                    Score 18.4; DB 1;
Pred. No. 1.1e+02;
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Pred. No. 1.1e+02
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CAGTGGTGAAAGAGACCTTG

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DEFINITION
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A89366/c
LOCUS
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AUTHORS
TITLE
JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             635
unidentified unidentified unclassified.
                                                                  Sequence
A89366
                                                                                                                                                                                                                                                                                                     1 (bases 1 to 22)
Coffman,R., Yokota,T., Crute,J.J., Lee,F. and Arai,K.-i.
Human pleiotropic immune factor and muteins thereof
Patent: EP 0267779-A2 12 18-MAY-1988;
Location/Qualifiers
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Sequence 12 from Patent EP 0267779.
105460
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                                                     A89366.1
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Canis familiaris
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Sequence 3 from Patent WO0111049,
AX083941
                                                                                            A89366
                                                                                                                                                                                                                                                                                                                                                                         Unclassified.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
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                                                     GI:6737936
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Pred. No. 1.2e+02;
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Pred. No. 1.1e+02;
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A89368/c
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A89367/c
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Query Match
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Sequence
A89368
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Brysch, W. and Schlingenslepen, K.
BRYSCH, W. and Schlingenslepen, K.
ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
PATENTE, WO 9833904-A 1516 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
LOCATION/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 18)
Brysch, W. and Schlingensiepen, K.
AN ANTISENSE OLIGONUCLEOTIDE PREPARATION
PATENT: WO 9833904-A 1515 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
LOCALION/Qualifiers
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Brysch, W. and Schlingenslepen, K.
ANTISENSE OLIGONUCLECTIDE PREPARATION METHOD
PATENT: SONS 0933904-A 1514 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
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                                      /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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/db_xref="taxon:32644"
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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00.0%; Pred. No. 1e+02;
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  Score 18;
Pred. No.
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A89369/c
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A89371/c
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A89370/c
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A89369
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Sequence 1519 from Patent
A89371
A89371.1 GI:6737941
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Brysch, W. and Schlingensiepen, K.

ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD Patent: WO 9833904-A 1518 06-AUG-1998;

BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
                                                                                                                                                                                                                                                                                                                                                                              A89370 18 bp D
Sequence 1518 from Patent WO9833904.
A89370 .
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1 (bases 1 to 18)

Brysch, W. and Schlingensiepen, K.

ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD PAtent: WO 9833904-A 1517 06-AUG-1998;

BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)

Location/Qualifiers
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unidentified
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I39665
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                                                d Unclassified.
Unclassified.
1 (bases 1 to 18)
Sullivan,S., Draper,K.G., McSwiggen,J. ar
IL-5 targeted ribozymes
L Patent: US 5616488-A 705 01-APR-1997;
L Coation/Qualifiers
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Sequence
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I39665
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Sullivan,S., Draper,K.G., McSwiggen,J.
IL-5 targeted ribozymes
Patent: US 5616488-A 703 01-APR-1997;
Location/Qualifiers
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Erysch, W. and Schlingensiepen, K.
AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
PAtent: WO 9833904-A 1519 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
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                                             /organism="unknown"
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/mol_type="unassigned DNA"
                                 /mol_type="unassigned
                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
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                                                                                                                                                                                                                                                                                                                                                                         organism="unknown"
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139671
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Sullivan, S., Draper, K.G., McSwiggen, J.
IL-5 targeted ribozymes
Patent: US 5616488-A 709 01-APR-1997;
                                                                                                                                                                                                                                                                                                                                                         Sequence
I39671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sullivan,S., Draper,K.G., McSwiggen,J.
IL-5 targeted ribozymes
Patent: US 5616488-A 707 01-APR-1997;
Location/Qualifiers
Unknown.
Unclassified
                                                                                                                                                                                                                                                                                                              Unknown.
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707 from patent US 5616488.
                                                             42 from patent US
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                                                                                                                                                                                                              /mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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Pred. No. 1e+02;
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Sullivan, S.M. and Draper, K.G.
Ribozymes targeted to TNF-.alpha. RNA
Patent: US 5616490-A 42 01-APR-1997;
                                                                                                                                                                    Stinchcomb, D.T., Dudycz, E.W., Chowrita, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Katulic-Adamic, J., Karpeisky, A., Dodak, A., Pavco, P., Beigelman, L., Sulliven, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                           unidentified
unidentified
                                                                                                                                                                                                                                                                                                                  Sequence 2907 from Patent AX635768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 18)
Sullivan, S.M. and Draper, K.G.
Ribozymes targeted to TNF-.alpha. RNA
Patent: US 5616490-A 54 01-APR-1997;
                                                                                                                                           Method and reagent for inhibiting the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
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                                                                                 Patent: EP 1260586-A 2907 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
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Similarity 100.0%; Pred. No. 1e+02;
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Similarity 100.0%;
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/mol_type="unassigned DNA"
                            /organism="unidentified"
/mol_type="unassigned RN
/db_xref="taxon:32644"
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Pred. No. 1e+02;
 Score 18;
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AX635770
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AX635772
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Matches 18; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2911 from Patent
AX635772
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RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
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                                                                                                                                   Patent: EP 1260586-A 2911 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
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                                                                  /organism="unidentified"
/mol_type="unassigned RNA"
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0.6%; Score 18; DB 1; Length 18; 100.0%; Pred. No. 1e+02; tive 0; Mismatches 0; Indels
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Matches 18; Conserv
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                                                                                                                                                                                                                                                                                                                                                                        unidentified
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31-JAN-1997 EP 97101531.8
KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
C12N15/11, C07H21/04, A61K31/70
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JP 2001511000-A/1514
07-AUG-2001
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Location/Qualifiers
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/db_xref="taxon:32644"
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Pred. No. 1e+02;

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RESULT 159
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Schlingenslepen,K.H. and Brysch,W.

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BICONOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH

OS Unknown

PN JP 2001511000-A/1515

PD JP 2001511000-A/1515

PD JP 30-JAN-1998

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            E 1 (bases 1 to 18)

S Schlingensiepen, K.H. and Brysch, W.
An antisense oligonuclectide preparation method
L Patent: JP 2001511000-A 1516 07-AUG-2001;
BICCNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTI
OS UNknown
PN JP 2001511000-A/1516
PD 07-AUG-2001
PF 30-JAN-1998 JP 1998532533
PF 30-JAN-1998 JP 1998532533
PF 31-JAN-1997 EP 97101531.8
PI KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
PC C12N15/11,C07H31/04,A61K31/70
CC An antisense oligonuclectide preparation metho
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An antisense oligonucleotide preparation method.
BD066881 GI:22612484
JP 2001511000-A/1516.
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30-JAN-1998 JP 1998532533
31-JAN-1997 EP 97101531.8
KAL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
C12N15/11,C07H21/04,A61K31/70
An antisense oligonucleotide preparation method
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/mol_type="genomic DNA"
/db_xref="taxon:32644"
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RESULT 160
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BD066883 I GI:22612486
JP 2001511000-A/1518.
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BD066882.1
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1 (bases 1 to 18)
Schlingensiepen,K.H. and Brysch,W.
Schlingensiepen,K.H. and Brysch,W.
An antisense oligonucleotide preparation method
Patent: JP 2001511000-A 1518 07-AUG-2001;
BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
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31-JAN-1997 EP 97101531.8
XARL HERMANN SCHLINGENSIEDEN, WOLFGANG BRYSCH
C12N15/11,C07H21/04,A61K31/70
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/mol_type="genomic DNA"
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Search completed: December 14, 2004, 16:01:17 Job time : 7 secs
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Matches 18; Conserv
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E 1 (bases 1 to 18)

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Schlingenstepen,K.H. and Brysch,W.

An antisense oligonucleotide preparation method

Patent: JP 2001511000-A 1519 07-AUG-2001;

BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH

OS Unknown

PN JP 20015111000-A/1519

PD 07-AUG-2001

PD 07-AUG-2001

PP 30-JAN-1998 JP 1998532533

PR 31-JAN-1998 JP 1998532533

PR 31-JAN-1997 EP 971015311.8

PI KARL HERMANN SCHLINGENSIEPEN,WOLFGANG BRYSCH

PC C12N15/11,C07H21/04,A61K31/70

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07-AUG-2001

30-JAN-1998 JP 1998532533

31-JAN-1997 EP 97101531.8

31-JAN-1997 EP 97101531.8

CLILINGENSIEPEN, WOLFGANG BRYSCH

CLINIS/11,CO7H21/04,AG1K31/70

An antisense oligonucleotide preparation method FH Location/Qualifiers
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OM nucleic - nucleic search, using sw model GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

Run on: December 14, 2004, 16:05:30 ; Search time 8 Seconds (without alignments) 4.201 Million cell updates/sec

Scoring table:

Title: Perfect score: Sequence: US-10-679-532-78 3230 ATCCTAATCAAGACCCCAGT.....AAAACTTCTCTCAAGGATCC 3230

IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 234 seqs, 5203 residues

Total number of hits satisfying chosen parameters:

468

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 237 summaries

Database : rngdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Human IL5 polynucl Mouse Interleukin

Human

IL-5 antisen IL-5 gene re

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Human IL5 polynucl
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Multiplex PCR prim
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Mouse Interleukin	1 ABX04317	20		ġ	N	Human interleukin-	202	0	•	20	
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Mouse IL-5 PCR pri	1 AAH19613	20		•	ĸ,	Human interleukin-	202	0	٠	20	
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Human G72 siNA oli		19			.,	Human interleukin-	204	0	٠	20	
Mouse IL-5 antisen		19		7	c 220	Human interleukin-	202	0	•	20	
IL-5 promoter muta		21		18	ĸ,	Human ILS DNA frag	925	0	٠	20	
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Human IL-5 antigen	1 ABZ95276	18		18		Human Interleukin	36	0	•	20	
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DNA encoding secre	1 ABX03869	18		10	.,,	Human Interleukin	4	0 (21	
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Human IL5 antisens	1 AAT76222	18		18	N	Human Interleukin	437	0	•	20	
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1L-5	1 AAT54732	18		18	204	Human Interleukin	436	0	•	20	
IL-5	1 AAT54731	18		18	203	Human Interleukin	435	0	•	20	
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Phytochrome 10 PCR	1 AAH48099	24		9		an	369	0	•	20	
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                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 16 A; 11 C; 10 G; 13 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                       (revised)
(first entry)
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93US-00123936.
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                                                                                                                                                                                                                                                                                                                                                                       Score 50; DB 1
Pred. No. 3.8;
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                                                                                                                                                                                                                                                                                                                                                         Mismatches
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    useful in pharmaceuticals and

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                                                                                                                                                                                                              the binding characteristics of a DNA-binding protein to duplex DNA comprises contacting the duplex DNA with a small molecule which binds sequence-specifically to a target region, where, when the small molecule is bound to the target region, it is adjacent to, but not overlapping by more than 4 bp, a binding site for a DNA-binding protein. The small components of the DNA binding protein, pref. TFIID, to its binding site on the duplex DNA. The binding of the small molecule may inhibit or enhance the binding of the DNA-binding protein to its binding site. The compounds isolated compounds in the binding of the small molecule may inhibit or enhance the binding of the DNA-binding protein to its binding site. The compounds isolated compounds in the binding site of a sequence, e.g. cancer, or inherited genetic disorders etc. The method is suitable for conserving large biological or chemical libraries and allows determination of sequence-specific and relative affinities of known DNA-binding agents for different DNA sequences. The deasign of these duplex DNA's allows a single DNA:portein interaction to be used for screening sequence-specific, or preferential, DNA binding proteins that recognise almost any possible sequence (see also AAT49539-74). (Updated on 25-MAR-2003 to
                                                                               Matches
                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequences given in AAT63713-4312 represent duplex DNA's which act as target regions in the method of the invention. The method for altering the binding characteristics of a DNA-binding protein to duplex DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 6; Col 207-208; 264pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Altering binding characteristics of DNA binding proteins to duplex DNA by attaching specific small cpd. to target region close to the protein' binding site, useful in treatment of viral disease, cancer etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fry KE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-JUN-1991;
23-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US5578444-A.
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                                                                                                                                                            Sequence 50 BP; 16 A; 11 C; 10 G; 13 T; 0 U; 0 Other;
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                                     459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
                                                                               50;
                                                                                                    Similarity
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                                                                             Conservative
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93US-00123936.
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                                                                                                  1.5%;
                                                                               0
                                                                                                                    Score
                                                                                                    Pred.
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                                                                                 Mismatches
                                                                                                    . No.
                                                                                                    3.8;
                                                                                                                    DB 1;
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                                                                                                                    Length 50;
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RESULT 3
AAXI7214
ID AAXI
XX
AC AAXI
XX
XX
DT 06-M
XX
DE Test
XX
XX
                                                           Test sequence; DNA-binding molecule; screening sequence; human; nucleic acid amplification; target; viral; ds.
                                                                                                                                                                                                                                                          AAX17214 standard;
                                                                                                                           Test sequence
                                                                                                                                                                      06-MAY-1999
                                                                                                                                                                                                                AAX17214;
                                                                                                                                                                        (first entry
                                                                                                                              from human interleukin 5 (IL-5) gene.
                                                                                                                                                                                                                                                          DNA;
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Duplex DNA; target region; binding characteristic; DNA binding protein; TFIID; transcription factor; binding site; inhibition; enhance; IL-2; cancer; inherited genetic disorder; alpha-D-galactosidase A; ds.

Human interleukin-5 gene TFIID binding site.

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RESULT 4
ABK82705
ID ABK8
XX ABK8
AC ABK8
XX ABK8
AC ABK8
XX DNA
XX DNA
XX DNA
XX DNA
XX DNA
XX DNA
XX PNA
XX PNA
XX PNA
XX Synt
XX Synt
XX US6:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        having a test sequence adjacent to a screening sequence, where the screening a test sequence adjacent to a screening sequence, where the affinity that is independent of the DNA bequence of that he binding cand where the mixture of duplex DNA test oligonucleotides includes several test sequences; (ii) incubating the test molecule, the mixture of duplex DNA test oligonucleotides and the DNA-binding protein for a time sufficient to permit binding of the test molecule to test sequences in the duplex DNA; (iii) separating unbound test oligonucleotides from test oligonucleotides bound to binding protein; (iv) amplifying the unbound test oligonucleotides; (v) repeating steps (ii) to (iv); (vi) isolating the amplified test oligonucleotides; and (vii) sequencing the isolated test oligonucleotides. Test sequences AAX17001-X17481 and AAX17600 correspond to promoter targets for human genes and test sequences
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Matches
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23-DEC-1992;
17-SEP-1993;
20-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequences AAX17001 to AAX17600 represent specifically claimed target test sequences that are used in the method of the invention of determining the DNA sequence preference of a DNA-binding molecule. The method comprises:

(i) adding a test molecule and a DNA-binding protein to a mixture of diplex DNA test oligonucleotides, each of the test oligonucleotides
                                                                      DNA binding molecule screening; inhibition of transcription; human immunodeficiency virus; HIV; parasite; cancer; cardiova respiratory; gastrointestinal; endocrine; metabolic; rheumati immunological; haematological; neurological;
                              Synthetic
                                                           immunological; ha ophthalmological;
                                                                                                                                                   DNA binding
                                                                                                                                                                                   27-AUG-2002
                                                                                                                                                                                                                 ABK82705;
                                                                                                                                                                                                                                              ABK82705 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; Col 209-210; 270pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determination of DNA sequence preference of a based on inhibition of binding of protein to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fry
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                                                                                                                                                   molecule screening method test sequence
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92US-00996783.
93US-00123936.
93US-00171389.
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100.0%; Pr
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O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a DNA-binding molecule -
o oligonucleotide sequence
                                                            рвусhiatric; dermatological,
al disorder; вв.
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                                                                                         rheumatic;
                                                                                                      cardiovascular;
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                                                                                                                    infection;
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US6384208-B1

WO200257414-A2

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RESULT 5
ABZ03720
ID ABZ0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-DEC-1992;
17-SEP-1993;
20-DEC-1993;
07-JUN-1995;
                                                                                                              T7; leukocyte; gene expression profiling; allograft rejection; atherosclerosis; congestive heart failure; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 50
                                                                                                                                                                        Human leukocyte
                                                                                                                                                                                                      09-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-JUL-1999;
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                                                                     Homo sapiens
                                                                                                                                                                                                                                 ABZ03720;
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50; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transcriptional activity of genes for treating infections or administration of an agent that binds to two non-overlapping the gene.
                                                                                                                                                                                                                                                                                                                                                                                          1.5%; So lilarity 100.0%; I Conservative 0;
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93US-00123936.
93US-00171389.
95US-00482080.
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                                                                                                                                                                        expression profiling
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Pred. No.
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene, where the gene corresponds to any of 8143 oligonucleotides (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful for leukocyte expression profiling. It is particularly useful for disgnosing a disease, monitoring (rate of) progression of a disease, predicting therapeutic outcome, determining prognosis for a patient, predicting disease complications in an individual or monitoring response to treatment in an individual. The diseases include cardiac allograft rejection, kidney allograft rejection, liver allograft rejection, atheroselerosis, congestive heart failure, systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New system for leukocyte expression profiling, diagnosing a disease, or monitoring (the rate of) progression of a disease, e.g. atherosclerosis or congestive heart failure, comprises diagnostic oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 445; Opp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-OCT-2000; 2000US-0241994P.
08-JUN-2001; 2001US-0296764P.
                            Wohlgemuth J,
                                                                                 20-OCT-2000; 2000US-0241994P
08-JUN-2001; 2001US-0296764P
                                                                                                                           22-OCT-2001; 2001WO-US047856.
                                                                                                                                                      25-JUL-2002.
                                                                                                                                                                                WO200257414-A2
                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                  T7; leukocyte; gene expression profiling; allograft rejection; atherosclerosis; congestive heart failure; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
                                                                                                                                                                                                                                                                                                         Human leukocyte gene expression profiling
                                                                                                                                                                                                                                                                                                                                      09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                           ABZ02014 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             comprises one or two isolated DNA molecules that
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                                                       (BIOC-) BIOCARDIA INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d R, O
              Fry K, Matcuk G,
d R, Quertermous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Quertermous T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matcuk G,
                                                                                                                                                                                                                                                                                                                                                                                           50 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 50; DB 1;
Pred. No. 3.8;
               H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Altman P,
                           Altman P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for detecting gene expression, which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Johnson
               Johnson
                                                                                                                                                                                                                                                                                                         probe SEQ
                 T
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                            Prentice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 50;
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                                                                                                                                                                                                                                                                                                          ID NO 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Phillips
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RESULT 7
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a system for detecting gene expression, which comprises one or two isolated DNA molecules that detect expression of a gene, where the gene corresponds to any of 8143 oligonucleotides (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful for leukocyte expression profiling. It is particularly useful for diagnosing a disease, monitoring (rate of) progression of a disease, predicting therapeutic outcome, determining prognosis for a patient, predicting disease complications in an individual or monitoring response to treatment in an individual. The diseases include cardiac allograft rejection, kidney allograft rejection, liver allograft rejection, atherosclerosis, congestive heart failure, systemic lupus erythematosus, because of the content of the cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           systemic lupus erythematosis; rheumatoid arthritis; cholecystitis; Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondylitis; ulcerative colitis; primary sclerosing cholangitis; appendicitis; diverticulitis; primary biliary sclerosis; probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New system for leukocyte expression profiling, diagnosing a disease, or monitoring (the rate of) progression of a disease, e.g. atherosclerosis or congestive heart failure, comprises diagnostic oligonucleotides.
                                                                                                                                            Diagnosing or monitoring autoimmune and chronic inflammatory such as rheumatoid arthritis, systemic lupus erythematosus, u colitis, psoriasis and asthma by detecting the expression lev
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 50 BP; 19.A; 9 C; 11 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human DNA probe used to monitor expression of diagnostic genes SeqID930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADG33606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADG33606 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 390; Opp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-636525/68.
                                                                       Claim 1; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                      24-APR-2002; 2002US-00131827
                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-APR-2003; 2003WO-US013015.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003090694-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human; ss; autoimmune; chronic inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
                                                                                                                                                                                                                                                       WPI; 2003-877243/81.
                                                                                                                                                                                                                                                                                                                                                         (EXPR-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2327 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA
                                                                                                                          genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50;
                                                                                                                                                                                                                                                                                                                                                      EXPRESSION DIAGNOSTICS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                                                                                                                      Fry K,
                                                                       NO 930; 877pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.5%;
                                                                                                                                                                                                                                                                                                      Woodward R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 50;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 3.; Mismatches
                                                                                                                                                  systemic lupus erythematosus, ulcerative by detecting the expression level of one
                                                                                                                                                                                                                                                                                                      Ly N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
3.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SLE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                       diseases,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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This invention relates to novel methods for diagnosing and matter autoimmune and chronic inflammatory diseases. Specifically,

monitoring, it refers

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or

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the identification of genes that have a clinical utility as diagnostic tools for the management of, in particular, patients with systemic lupus erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the present invention describes a method for determining the levels of multiple differentially expressed genes of a patient, in a concerted manner, in order to achieve an improved diagnostic assay with sensitivity and specificity for the disease in question. As such, these genes are useful for the diagnosis of various other inflammatory disorders including cholecystitis, Sjogren's disease, CREST syndrome, scleroderma, ankylosing spondylitis, ulcerative colitis, primary sclerosing cholangitis, appendicitis, diverticulitis, and primary biliary sclerosis. This oligonucleotide is a human DNA probe used to monitor the expression level of the differentially expressed diagnostic genes of the invention.
Seguence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;
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99999999999998% 999999999999 Matches Query Match Best Local Local Similarity 50; Conservative 1.5%; 0 Score 50; Pred. No. Mismatches 3.8; DB 1; <u>.</u>. Length Indels 50; 0 Gaps

0

밁 Ś 2327 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 2376 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 50

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RESULT 8
ADE80244
   Duplex oligonucleotide for DNA protein binding
                                  29-JAN-2004 (first entry)
                                                                                                 ADE80244 standard; DNA;
                                                                                                 50
                                                                                                 ΒP
assay seq id 214.
```

DNA-binding; screening; promoter duplex DNA test oligonucleotide; DNA protein binding; target; human;

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27-JUN-1991;
23-DEC-1992;
17-SEP-1993;
20-DEC-1993;
07-JUN-1995;
                                                                                                       13-NOV-2001;
                                                                                                              03-JUL-2003
                                                                                                                      US2003124530-A1
                                                                                                                             Homo sapiens.
                                                                                                       2001US-00993346
                                                                            91US-00723618.
92US-00996783.
93US-00123936.
93US-00171389.
95US-00482080.
99US-00354947.
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Ç, Cantor CR, Andrews BM, Turin LM, FTY

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WPI; 2004-031270/03.
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(GENE-)

GENELABS

TECHNOLOGIES

INC

Screening for sequence-directed DNA-binding molecules comprises adding test molecule to a test system composed of a DNA-binding protein and a duplex DNA test oligonucleotide having adjacent screening and test

Claim 2; QES ID NO 214; 283pp; English

The invention describes a method for screening for molecules capable obinding to a selected test sequence in a duplex DNA. The above method comprises: constructing a duplex DNA test oligonucleotide having a screening sequence adjacent to a selected test sequence, where a DNA-binding protein is effective to bind to the screening sequence with a binding affinity that is substantially independent of such test sequence but where DNA protein binding to the screening sequence is sensitive to sensitive to ဓ္

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                                           binding of test molecules to such test sequence; adding a test motobe screened to a test system composed of the DNA-binding protein anothe the duplex DNA test oligonucleotide having the screening and test sequences adjacent one another; incubating the molecule in the test system for a period sufficient to permit binding of the molecule being tested to the test sequence in the duplex DNA; and comparing the amount of binding protein bound to the duplex DNA before and after the adding. The method is useful in screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The method may also be used in characterising the preferred binding sequence of any selected DNA-binding molecule. This sequence represents a test sequence corresponding to a promoter target of a human gene.
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Sequence 50 BP; 16 A; 11 C; 10 G; 13 T;
  0 U; 0 Other;
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Matches
              Query
        Local
              Match
   50;
        Similarity
   Conservative
1.5%; 5c.
100.0%; Pr
        Score :
   Mismatches
        . 50;
        3.8;
              DB 1;
   0
             Length
   Indels
   0
   Gaps
   0
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밁
                             S
                    459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
 50
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RESULT 9
AAZ55589/c
Interleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 lig
interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline
granulocyte macrophage colony-stimulating factor; inhibitor;
                                                                                                                                                                                                                                                                                                                AAZ55589
                                                                                                                                                                                                                                                                  Degenerate mammalian IL-5 antisense PCR primer 1,
                                                                                                                                                                                                                           vaccine;
                                                                                                                                                                                                                                                                                15-SEP-2003
14-MAR-2000
                                                                                                                                                                                                                                  .mmune response;
                                                                                                                                                                                                                                                                                                                 standard; DNA; 42
                                                                                                                                                                                                                                                                               (revised)
(first entry)
                                                                                                                                                                                                                           primer; ss.
                                                                                                                                                                                                                                 immunoregulation; tumour; cancer; autoimmune disease;
                                                                                                                                                                                                                                                                                                                 ₽₽
                                                                                                                                                                                                                                                                   SEQ ID
                                                                                                                                                                                                                                               feline;
                                                                                                                                                                                                                                                      ligand;
                                                                                                                                                                                                                                                                   NO:135
                                                                                                                                                                                                                                                       CD154;
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Chimeric Felis catus. Homo sapiens

02-DEC-1999. WO9961618-A2

29-MAY-1998; 28-MAY-1999; 98US-0087306P 99WO-US011942

(HESK-) HESKA

Sim G, Yang S, Dreitz 3 Wonderling

Nucleic acids encoding useful for treating or immunoregulatory proteins from cats or dogs, preventing e.g. tumors or autoimmune disease disease.

Example 5A; Page 106; 264pp; English

and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, get an entibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including ligand) and fel: The invention relates to canine interleukin-4 (IL-4), canine Flt-3 ligand, canine or feline CD40, canine or feline CD154 (ligand), canine IL-5, canine IL-13, feline interferon-alpha CD40 (IFN-alpha) feline

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RESULT 10
AAQ57198
Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                       07-DEC-1992;
07-DEC-1992;
19-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          response from a co-administered antigen. The nucleotide sequences can also be used for the recombinant production of a protein, while nucleotide fragments are useful as probes, as amplification primers and as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug targetting. Sequences AAZ55491-Z55498, AAZ55513-Z55515 and AAZ55581-Z55608 represent PCR primers used in isolation, amplification and cloning of cDNAs encoding the immunoregulatory proteins of the invention.
                                                       RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concn. of the ribozyme necessary to effect a therapeutic treatment is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Interleukin-5; specific; cleavage; target RNA; protein; expression;
inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention
psoriasis; asthma; inflammatory diseases; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 42 BP; 15 A; 5 C; 7 G; 13 T; 0 U; 2 Other;
                                       concn. of the ribor
                                                                                                                                                                                 Enzymatic RNA molecules which cleave inflammatory, arthritic, stenotic or
                                                                                                                                                                                                                                                                                                                                                                    17-JUL-1992;
07-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
26-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ57198 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  allergies,
                                                                                                      This is an IL-5 mRNA target sequence (nucleotide no. 370) of an enzymatic
                                                                                                                                      Claim
                                                                                                                                                                               inflammatory,
                                                                                                                                                                                                                               WPI; 1994-048853/06.
                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                   02-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9402595-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cardiovascular condition; hypertension; arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Enzymatic RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2390
                                                                                                                                    3; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40;
                            is higher. (Updated
                                           of the ribozyme necessary to effect a therape
han that of an antisense oligonucleotide and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                              SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumours, inflammation and graft rejection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first en
                                                                                                                                   17; 65pp; English.
                                                                                                                                                                                                                                                                                                                       92US-00916763.
92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    molecule IL-5
                                                                                                                                                                                                                                                            Draper
                                                                                                                                                                                                                                                                                                                                                                                                                   93WO-US006316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ې
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 41.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.
                                                                                                                                                                                   mRNA - used to cardiovascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                   treat or
diseases
                                              the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and to increase
                              specificity of
field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prevention;
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Sequence 34 BP;

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6 T; 0 U; 0 Other;

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33

GTAATGAACACCGAGTGGATAATAGAAAGTTGA

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RESULT 11
AAT138975/c
ID AAT1389
XX AAT1389
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Rest Local Similarity

Matches 34; Conser
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                                                                             Query Match
Best Local S
Matches 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RNA was extracted from genital lesions, reverse transcribed to produce CDNA and then the CDNA was used as the template for PCR amplification of various cytokines using the primers in AAT38964 - AAT39005. To confirm the identity of amplified CDNA, digoxigenin-labelled probes specific for each cytokine (see AAT39006-T39021) were hybridised with Southern blots of amplified sequences. The expression profile for regressing warts was established and compared to cytokine expression regressing warts was established and compared to cytokine expression patterns in normal cervical tissue. Results showed that interleukin 12 in patterns in normal cervical tissue. Results showed that interleukin 12 in patterns in normal cervical tissue.
                                                                                                                                                                                                                                                                             barely expressed (if at all) in non-regressing warts, but is expressed in regressing warts. This suggests a central role for II-12 in wart regressing. It has been found that II-12 can be used (especially as a vaccine adjuvant) for treating papilloma virus-associated lesions such as condyloma acuminata (anogenital warts) caused by human papilloma virus type 6 (HPV-6) and/or HPV-11 and more generally for treatment of tumours associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Use of interleukin-12 to treat papilloma virus-associated lesions - eas a vaccine adjuvant with papilloma virus antigen for immuno:therapy warts or tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytokine; expression profile; genital wart; interleukin 12; IL-12; tumour regression; adjuvant; polymerase chain reaction; PCR; tumour acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18; anogenital; cutaneous; laryngeal; oesophageal; cancer; 88.
                                                                                                                                                                                            Sequence 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 14; 32pp; English.
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2184 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
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                                                                                                           Similarity
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                                                                                                                                                                                                                                                  and oesophageal
                                                                                                                                                                                               BP;
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                                                                                Conservative
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100.0%; Pr
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100.0%; Pr
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                                                                                                           Score 33;
Pred. No.
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                                                                                Mismatches
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                                                                                                           DB 1;
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26;
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RESULT 12 AAT47001/c

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                                                                                                                                                               CC response after T-cell receptor stimulation. Naive T-cells are cells which CC have recently emigrated from the thymus and have a predominantly correctly emigrated from the thymus and have a predominantly correctly engineers can be used in the method of the invention. The comethod of the invention is for evaluating the efficacy of a drug to stimulate the production of naive T-cells. The method comprises obtaining can be used in the method comprises obtaining a sample containing peripheral blood mononuclear cells from a subject. A complete containing the stimulations are then isolated from the sample is conductable dose of a drug is then administered before a second sample is contained. The T-cells in each population is then determined by combained. The T-cells in each population is then determined by contained. The T-cell sunfance proteins. If the number of naive T-cells in the second population is significantly greater than the number cells in the second population is significantly greater than the number of the first, then the drug is identified as being effective. The method can be used to identify naive T-cell count elevating drugs, particularly in immuno-compromised subjects, e.g. HIV positive subjects, cancer patients or individuals with viral infection or autoimmune disease
                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT46992-T47005 represent amplification primers for DNA encoding cytokines from CD8 T-cells. This sequence and AAT47000 are primers for the interleukin-5 gene. CD8 cells provide cell mediated immunity through both cytotoxic and suppressor mechanisms. The naive subset of CD8 cells expresses the CD45RA surface marker, and make a relatively poor cytokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR; polymerase chain reaction; primer; amplify; beta-actin; IL-2; IL-4; interferon-gamma; interleukin-2; peripheral blood mononuclear cell; IL-5; granulocyte macrophage colony stimulating factor; GM-CSF; cytokine; PBMC; CDB cell; T-cell; cell mediated immunity; cytotoxic; CD5RA; IL-10; HIV; surface marker; naive T-cell; thymus; proliferative response; antibody; cognate antigen; immuno-compromised; cancer; viral infection;
                                                                                                                                                               Sequence 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Detection of naive T cells in subjects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-213057/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-SEP-1996;
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                                                                                                    Similarity
                           GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
    GTAATGAACACCGAGTGGATAATAGAAAGTTGA
                                                                                                                                                               BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 23; 56pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          drugs for
                                                                               Conservative
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                                                                                                                                                               7 A;
                                                                                                  1.0%;
                                                                                                                                                             9 C; 3 G; 14 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    English
                                                                               <u>,</u>
                                                                                                  Score 33;
Pred. No.
                                                                               Mismatches

    useful to identify production
d subject treatment.

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                                                                                                                   Length 33;
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RESULT 14
AAX54023/c
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AAT76227/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMIISASS specific for the human IL5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its broad the proposition of the subject to the sub
Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            preventing adenosine-induced bronchoconstriction in patients reactive airways
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                                                                                                    Human
                                                                                                                                                     05-JUL-1999
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                                                                                                                                                                                                                                                       AAX54023 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Asthma; airway epithelium; adenosine free; cystic fibrosis;
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                                                                                                    antisense oligonucleotide fragment.
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                                                                                                                                                                                                                                                       DNA; 32
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Pred. No.
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acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis;

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RESULT 15.
AAA33467/c
ID AAA334
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AC AAA334
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DT 28-JUL
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DT 28-JUL
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DE Low ad
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KW Human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pencreatic cancer, as hepatic cancer, as hepatic metastases, as hepaticcellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pulmonary hypertension; pulmonary vasoconstriction; emphysema;
chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
colon cancer; breast cancer; lung cancer; pancreatic cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 49; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-229400/19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-SEP-1997;
09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9913886-A1
                                                                                                                                                                                                                                                          AAA33467 standard; DNA; 32 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vasoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prostate cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3123 CCCGGGGCAGGCAGCACCAGGCCGCACAACA 3154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              as all types of cancers which may metastasize or have metastasized
he lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                             32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                          CCCGGGGCAGGGCAGCAGGCCGCACAACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97US-0059160P.
98US-00093972.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98WO-US019419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 32; DB 1; Length 32; Pred. No. 33;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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Low adenosine antisense oligonucleotide SEQ ID NO:1156.

RESULT 16
AAF19589/c
ID AAF195
XX
AC AAF195

AAF19589 standard; DNA; 32

AAF19589

밁 Ś

32

0;

Human; adenosine receptor; low adenosine antisense oligonucleotide;

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The present invention describes a new composition comprising an antisense CC oligonucleotide (ON) with low adenosine (up to 15%), which targets culletic acids involved in bronchoconstriction, allergies, and/or CC inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are CC useful for the treatment of diseases associated with inflammation, CC impaired airways, including lung disease and diseases whose secondary CC effects afflict the lungs of a subject. They can be used for treating CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impaired airways, including lung disease on the used for treating CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive conditions, respiratory distress syndrome, pain, cystic conditions, pulmonary vasoconstrictive such as leukaemias, lymphomas, cc arctinomas, and cancers which may metastasise to the lungs, including contents of the present and prostate cancer. The reduction of the adenosine content of the CC release of deoxyademosine which activates adenosine receptors causing concloconstriction and inflammation. AAA32313 to AAA35312 represent the mucleotide sequences given in the sequence listing from the present the cromation, which correspond to SEQ ID NO:1 to 2815, and then the last 185 capuances are also called SEQ ID NO:1 to 185, but the sequences differ C componence of the present invention do not match constituted and corresponding SEQ ID NO: sequences given in the sequences given in th
                                                                                       Query Match
Best Local Similarity
Matches 32; Conserv
                                                                                                                                                                                                                                                                                Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 18; Page 409; 1343pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cancers.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Мусе ЈЖ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-FEB-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYEC-) UNIV EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                  listing
3123 CCCGGGGCAGGCAGCACCAGGCCGCACAACA 3154
                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0095212P
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                                                                                                                              1.0%;
                                                                                  Score 32; DB; Pred. No. 33; 0; Mismatches
                                                                                       <u>,,</u>
                                                                                                                                                                                        DB 1;
                                                                                       0;
                                                                                                                                                                              Length 32;
                                                                                            Indels
                                                                                            0
                                                                                            Gaps
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The present invention describes low adenosine (A) content antisense CC oligonucleotides and compositions (I) comprising them. In the antisense CC oligonucleotides the A is replaced by a 'Universal' or alternative base. (CI) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the CC expression and or activity of target polypeptides associated with CC lung/respiratory disorders and malignancies, such as stimulating and CI cantivating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and CC chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system creeptors, binding proteins and malignancy associated proteins. The CC receptors, defensins, growth factors, vasociative peptides and CC receptors, binding proteins and malignancy associated proteins. The CC including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or CC condition selected from pulmonary vasoconstriction, allergy(ies) and/or astima, impeded respiration, respiratory disease (COPD), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary condition, and composition, emphysema, chronic obstructive pulmonary disease (COPD), composition, and composition and antisense oligonucleotides used in the exemplification of the present human polynucleotide condition and antisense oligonucleotides used in the exemplification of the present human polynucleotide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 14; Page 208; 1592pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-679539/66
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-MAR-2001
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(NYCE/) NYCE J W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-MAR-2000; 2000WO-US008020.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IL5 polynucleotide fragment #1156.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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Query Match
Best Local Similarity

Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;

1.0%;

Score 32; Pred. No.

33 33

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Length

Query Match Best Local

Similarity

1.0%;

Score 32; Pred. No.

DB 1;

Length 32;

Sequence 32

BP; 0 A; 11 C; 13 G; 8 T; 0

U, 0 Other

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RESULT 17
ABZ95283/c
ID ABZ952
XX Human;
KW Human;
KW Antise
KW Adenos
KW Antise
KW Adenos
KW Antise
CO Tecept
PT Corres
CC Tinsti
CC Tinsti
CC Antiin
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                                                                            CC junctions of genes encoding a polypeptide associated with lung and/or comparations of genes encoding a polypeptide associated with lung and/or casal airway dysfunction and a second active agent comprising an comparation of the invention can be antiinflammatory, antiallergic, antiasthmatic, hypotensive, and cytostatic activity. The composition of the invention can be antisense gene therapy. The composition is useful for treating or compensation, also or preventing a respiratory, lung or malignant disease or condition, also composition are respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of an antiinflammatory steroid in a subject, for reducing or depleting levels of cof, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine composition or inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nyce JW,
Miller S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or correspond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; ateroid; ubiquinone; antiinflammatory; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-APR-2002; 2002WO-US013135
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, Tang L,
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L, Shahabuddin
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CC comprising oligonucleotides, effective for alleviating
CC comprising oligonucleotides, effective for alleviating
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC omposition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
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Best Local
                                                                       The present invention describes a method for concentrating a gene in a trace amount from a DNA sample containing the gene by separating it from a gene in a large quantity comprises dividing the sample into driver and target DNA fractions, mixing and forming single-stranded DNAs from them, hybridisation to produce a double-stranded DNA, and repeating the steps. The method can be used for concentrating a trace amount of an expressed gene even from large amounts of a (un)known gene, which is useful in screening industrial enzymes, pharmaceutical and agrochemical leads from nature e.g. soil, river and lake water, as well as antibiotics, and identifying parasitic and infectious microorganisms for disease diagnosis. The present sequence represents a PCR primer which is used in an example from the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Method for concentrating trace genes expressed even in presence of l amounts of (un)known genes, useful in screening industrial enzymes, pharmaceutical and agrochemical leads from nature.
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agrochemical; identification; parasitic;
disease diagnosis; PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 33; 62pp; Japanese.
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                                                                                                                                              primers AAQ86362-83 and AAQ87677-82 were used to detect the expression of various cytokines genes in HIV infected B-cell, T-cell deficient (BCTD) mice which have been transformed with human thymus, liver tissue and bone marrow implants (BCTD-huBM mice). These mice are immune-deficient for murine B- and T-cells but can express human immunity cells such as T-cells and monocytes in their peripheral lymphoid compartments. These mice are useful as models for the pathogenesis of human disease, e.g. for assaying the dissemination of HIV. The primers are used to assay the effect of HIV on cytokine gene expression e.g. as a model for human patients with HIV. The primers AAQ86376-7 are used to detect the expression of the interleukin-5 gene, using cDNA derived from mRNA extracted from the long bones of BCTD-HuBM mice. (Updated on 25-MAR-2003 to correct by field)
                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Primer; PCR; amplification; human; cytokine gene expression; HIV; more B-cell; T-cell; thymus; liver; tissue implant; immunity; monocyte; more peripheral lymphoid compartment; pathogenesis; beta-2 microglobulin; peripheral blood mononuclear cell; spleen; lymph node; interleukin; tumour necrosis factor; leukemia inhibitory factor; granulocyte; macrophage; colony stimulating factor; bone marrow; ss.
                                                                                                                                                                                                                                                                                                                                                                              B-cell, T-cell deficient (BTCD) assaying pathogenesis of human
                                                                                                                                       to correct PN field.
                                                                                                                                                                                                                                                                                                                                        Example 8;
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 detection PCR primer #2 in BCTD-huBM mice
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94US-00252773
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                                                                                                                                                                                                                                                                                                                                                                                 disease
                                                                                                                                                                                                                                                                                                                                                                             chimeric mice - useful as model disease e.g. HIV-1, and efficacy
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The invention relates to an isolated nucleic acid molecule comprising a CC length of about 100 nucleotides of less, which has a sequence at least CC about 70% identical to the human conserved non-coding sequence (CNS)-1 CC cluster region of chromosome 5931 containing interleukin gene CC cluster region of chromosome 5931 containing interleukin (LI) 4, IL5 and CC IL 13). Optionally, the nucleic acid has 70% identity to a human CNS-2 to CC CNS-16 or mouse CNS-1 to CNS-16 or their complements. Also included are: (C1) an expression cassette comprising a CNS-1 sequence operably linked to CC a promoter which controls transcription of a heterologous coding sequence (I) an expression cassette comprising an CC IL-13 gene and a CNS-1 sequence; (3) an expression cassette comprising an IL-4 gene, an IL-13 gene and a CNS-1 sequence flanked between two crecombination site sequences; (4) an expression cassette comprising an IL comprising one of the expression cassettes or the T-cell; and (7) CC animal comprising one of the expression cassettes or the T-cell; and (7) CC animal comprising one of the expression cassettes or the T-cell; and (7) CC animal comprising of a transcription factor to a CNS-1 sequence which compound where a CNS-1 sequence is deleted from its convolves contacting the compound with the T cell and determining the CC directions of the matibody against the transcription factor, or a small compound. The nucleic acid is useful for modulating expression cassettes with and without CNS sequence, an antibody against the transcription factor, or a small compound. The useful acid is useful for modulating expression cassette is cuseful for identifying compounds that modulate functions of CNS sequence (C1) are useful for making two lines of non-human transgenic animals that care identical except one line has the CNS-1 sequence and the other line compounds the cNS-1 sequence. The transgenic animals are useful as in vivo compounds the cappend to monitor the effects of CNS-1 are transcriptioner. The present sequence is a c
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                                                                                                                                                                                                                                       The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is a PCR primer used to obtain the sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                            Guo H,
                                                                                                                                                                                                                                                                                                                    Novel canine interleukin 5 polynucleotide and polypeptides are used generating antibodies which are useful in treating allergies in dogs
                                                                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2000; 2000WO-US021651.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Canine interleukin-5 coding sequence PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF74303 standard; DNA;
 Human gene specific PCR primer #56.
                       02-JUL-2002
                                                                                                                                                                                                                  Sequence 28
                                                                                                                                                                                                                                                                                               Disclosure;
                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-191542/19.
                                                                                                                                                                                                                                                                                                                                                                                                                        10-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dog; interleukin-5; IL-5; allergy; cancer; gene therapy; inflammatory reaction; PCR primer; ss.
                                             ABK65968;
                                                                   ABK65968 standard;
                                                                                                                                                                                                                                                                                                                                                                                                  (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1950 GTACTGTGGAAAGACTATTCAAAAACTTG 1978
                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29
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                                                                                                                                                                                                                                                                                                                                                                           Lawton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTACTGTGGAAAGACTATTCAAAAAACTTG 1
                                                                                                                        CTGATTGTTAGAAATTATTCATTTCCTC 28
                                                                                                                                      CTGATTGTTAGAAATTATTCATTTCCTC 467
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 8 A; 6 C; 4 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                 BP; 7 A;
                                                                                                                                                                                                                                                                                              Page 47; 48pp; English
                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                       (first entry)
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                                                                  DNA;
                                                                                                                                                                                                                                                                                                                                                                            Mermer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 29;
100.0%; Pred. No.
                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                 5 C; 3
                                                                                                                                                                                           0.9%;
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                                                                   ВP
                                                                                                                                                                                Score 28; DB 1; ; Pred. No. 51;
                                                                                                                                                                      0,
                                                                                                                                                                                                                 G; 13 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                           Aiyappa
                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                            ΑP;
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                                                                                                                                                                                           Length 28;
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1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939

Query Match Best Local S Matches 28

Similarity

0.9%; Silarity 100.0%; Conservative 0;

Score 28; Pred. No. Mismatches

DB 1; 51;

Length 28; Indels

0,

0

Gaps

0

Sequence 28

BP; 4 A; 9 C; 5 G; 10 T; 0 U; 0 Other;

밁

28

ABK14340/c RESULT 24

ABK14340 standard;

DNA;

28

뫄

Human interleukin-5

antisense PCR primer.

23-APR-2002 ABK14340;

(first

entry)

Human; ss; PCR; primer; interleukin-5; neuroprotective; nootropic; anticonvulsant; cerebroprotective; antiparkinsonian; vulnerary; immunosuppressive; microglia cell line; autoimmune disease;

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CC acids (NAs) comprising contacting a NA sample from a physiological cource, with a pool of 50 distinct gene specific primers under suitable conditions to enzymatically generate sub-population of NAs, where each CC gene specific primer has a sequence complementary to a distinct mRNA, and CC each labeled NA is generated using a single gene specific primer. The CC method is useful for producing a sub-population of labeled NAs which is CC useful for analysing the differences in the RNA profiles between several CC different physiological sources, where the method comprises producing CC subpopulation of labeled NAs for the different physiological sources, CC comprising the populations for each physiological sources, CC comprising the population, where the comparison is preferably CC performed by hybridising the labeled NAs for each of the distinct CC surface of a substrate to produce a hybridisation pattern for each of the sources, and comparing the patterns for each of the sources, where CC surface of a substrate to produce a hybridisation pattern for each of the sources, and comparing the patterns for each of the sources, where CC differential gene expression assays are utilised in differential correspondent tissue or subtissue types. The present sequence is a CC thuman gene specific pCR primer used in the method of the printed CC specification, but was obtained in electronic format directly from USPTO at high the pattern correspondent alternation. Note: Specific atton, but was obtained in electronic format directly from USPTO at high the population of correspondent suggestion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Producing sub-population of labeled nucleic acids, useful for analyzing differences in RNA profiles between several different physiological sources, using set of distinct gene specific primers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Primer; ss; DNA microarray; differential expression analysis; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-MAR-2002
at http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to producing a sub-population of labeled nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; SEQ ID NO 56; 11pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chenchik A, Jokhadze
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-MAY-1997;
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RESULT 25
AAQ57191
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Best Local S
Matches 28
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15-MAY-2001;
22-JUN-2001;
incerieukin-5; specific; cleavage; target RNA; protein; (
inhibitor; inhibition; ribozyme; treatment; prophylaxis;
psoriasis; asthma; inflammatory diseases; restenosis;
cardiovascular condition; hypertancian.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a genetically modified human microglia cell maintained stably in vitro which has (1) has demonstrable phagocytic properties; (ii) produces progeny continuously in culture; (iii) presents CDIIb and CD68 as surface antigens; and (iv) contains human genomic DNA that has been genetically modified to include a viral vector carrying at least one DNA segment encoding an exogenous gene for intracellular expression. The microglia cell line is useful for screening compounds for the treatment of autoimmune disease, and is used in the treatment of a neurodegenerative disorder e.g. Alzheimer's disease, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, stroke, spinal cord injuries, atexia, brain trauma, multiple sclerosis and AlDS-(acquired induced by the procession of the crossis of the crossis section of the content of the cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Genetically modified human microglia cell for treating neurodegenerative disease, comprises demonstrable phagocytic properties, produces progeny in culture, presents surface antigens, and contains modified human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; Huntington's disease; amyotrophic lateral sclerosis; stroke; spinal cord injury; ataxia; brain trauma; multiple sclerosis; acquired immunodeficiency syndrome; AIDS-dementia.
                                                                                                                                                              25-MAR-2003
26-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human microglia. The present sequence is an RT-PCR (reverse transcriptase PCR) primer which amplifies a segment of the mRNA for an expressed marker gene, used to characterise the cell line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kin
                                                                                                                  Enzymatic RNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-148175/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYBR-) UNIV BRITISH COLUMBIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-JUL-2001; 2001WO-IB001770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JAN-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGTCCTTAATAAAGAAATACATTGAC 2002
                                                                                                                                                                                                                                                                                                                                                                                       CTTGTCCTTAATAAAGAAATACATTGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%;
llarity 100.0%;
Conservative (
                                                                                                                                                            (revised)
(first ent
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2001US-00855468.
2001US-00887145.
                                                                                                                  molecule IL-5 mRNA target sequence.
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                                                                                                                                                                                                                                                                           mRNA;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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51;
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                                                                     expression;
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RESULT 26
ABN89421/c
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Best Local S
Matches 27
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07-DEC-1992;
19-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                     This is an IL-5 mRNA target sequence (nucleotide no. 61) of an enzymati RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concn. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of
                                                                                                                                           Concentrating gene; industrial enzyme scr
agrochemical; identification; parasitic;
disease diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Enzymatic RNA molecules which cleave mRNA - used to treat or inflammatory, arthritic, stenotic or cardiovascular diseases
                                                                                                                                                                                                                                                                                                                                                                       Sequence 27 BP; 4 A; 4 C; 8 G; 11 T; 0 U; 0 Other;
                                                                18-DEC-2001;
                                                                                                                         Homo sapiens.
                                                                                                                                                                                 Human IL5h related PCR primer Hr
                                                                                                                                                                                                     30-AUG-2002
                                                                                                                                                                                                                         ABN89421;
                                                                                                                                                                                                                                            ABN89421
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; Page 17; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-JUL-1993;
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                 (SUNR )
                                              19-DEC-2000; 2000JP-00386025
                                                                                                       WO200250268-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-)
                                                                                                                                                                                                                                                                                                              569
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                                                                                                                                                                                                                                                                                                                                l Similarity
27; Conserv
                 SUNTORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RIBOZYME
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                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                       ATTTGAGTTTGCTAGCTCTTGGAGCTG 595
                                                                                                                                                                                                                                                                                            ATTTGAGTTTGCTAGCTCTTGGAGCTG
                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                 2001WO-JP011113
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92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
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                   BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PHARM INC
                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                             0.8%; Dr
100.0%; Pr
                                                                                                                                                                                                     entry)
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                                                                                                                                                                                                                                                                                                                                           Score 27;
Pred. No.
                 LTD.
                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                  SEQ ID
                                                                                                                                                                                                                                                                                            27
                                                                                                                                                      screening; pharmaceutical;
ic; infectious; microorganism;
                                                                                                                                                                                   NO: 6.
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WPI; 2002-508798/54.

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RESULT 27
ACF04471
ID ACF04471
ACF04471
ACF044
XX ACF04
AX ACF04
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity Matches 27; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    trace amount from a DNA sample containing the gene by separating it from a gene in a large quantity comprises dividing the sample into driver and target DNA fractions, mixing and forming single-stranded DNAs from them, hybridisation to produce a double-stranded DNA, and repeating the steps. The method can be used for concentrating a trace amount of an expressed gene even from large amounts of a (un)known gene, which is useful in screening industrial enzymes, pharmaceutical and agrochemical leads from nature e.g. soil, river and lake water, as well as antibiotice, and identifying parasitic and infectious microorganisms for disease diagnosis. The present sequence represents a PCR primer which is used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acid level determination; PCR; primer; probe; DNA quantification; gene therapy; immunosuppressive; anti-HIV; antiarthritic; neuroprotective; cytostatic; antiallergic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Real time PCR targeting IL-5 probe P104.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 33; 62pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amounts of (un)known genes, useful in screening industrial enzymes, pharmaceutical and agrochemical leads from nature.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Method for concentrating trace genes expressed even in presence of large amounts of (un)known genes, useful in screening industrial enzymes. and
                              WPI; 2003-598531/56
                                                                                                                                                                                                                                                                                                                                                                               WO2003060119-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unidentified.
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                                                                                    Stordeur P,
                                                                                                                                                                                                                                                              20-JAN-2003; 2003WO-EP000493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                           (ULBR ) UNIV LIBRE BRUXELLES
                                                                                                                                                                                                     18-JAN-2002; 2002EP-00447009
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present invention describes a method for concentrating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTAATAAAGAAATACATTGACGGCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 6 A; 4 C; 5 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                    Goldman M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note=
27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "modified
                                                                                                                                                                                                                                                                                                                                                                                                                                        note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= b
/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                        "modified
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                        by TAMRA-p"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     βĄ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6FAM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'n
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The present invention relates to a method of quantifying in vivo RNA from CC a biological sample. This involves collecting the biological sample in a cumpound inhibiting RNA degradation and/or gene CC induction, forming a precipitate comprising nucleic acids, separating the precipitate from the supernatant, dissolving the precipitate using a CC buffer, forming a supernatant, dissolving the precipitate using a CC using an automated device, dispersing or distributing a reagent mix for construction (RT)-PCR using an automated device acids isolated within the dispersed reagent mix CC using an automated device acids isolated within the dispersed reagent mix CC using an automated device and determining the in vivo levels of transcripts using the nucleic acid solated within the dispersed reagent mix CC detecting changes in in vivo nucleic acids levels in a biological agent cC detecting changes in in vivo nucleic acids levels in a biological agent cC present, such as eukaryotic or prokaryotic cells, viruses or phages in a biological sample or for producing a medicament for treating immune CC related disease, e.g., autoimmunity, rheumatoid arthritis, multiple CC rejection or Graft versus Host Disease. The present sequence is a PCR primer/probe used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       medicament for treating immune rel
levels of transcripts using nuclei
reagent mix in an automated setup.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Quantifying in vivo RNA from a biological sample for producing a medicament for treating immune related disease by determining in v levels of transcripts using nucleic acid/reverse transcription-PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 42; 83pp; English.
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                                     Matches
                                             Query Match
Best Local
                                    Local Similarity
les 27; Conserv
                612 CCCCACAGAAATTCCCACAAGTGCATT 638
-
 CCCCACAGAAATTCCCACAAGTGCATT 27
                                     Conservative
                                              100.0%;
                                                         0.8%;
                                     0
                                              Score 27;
Pred. No.
                                     Mismatches
                                              DB 1;
                                     <u>,</u>
                                                       Length 27
                                    Indels
                                     0
                                     Gaps
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0

Sequence 27 BP; 9 A; 10 C; 3 G; 5 T; 0 U; 0 Other;

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RESULT 28
ABK65967
ID ABK65
05-MAR-2002.
                                                                                                                                    Human gene
                                                                                                                                               02-JUL-2002
                                                                                                     US6352829-B1
                                                                                                                Homo sapiens
                                                                                                                          Primer; ss; DNA microarray; differential expression analysis; human
                                                                                                                                                          ABK65967;
                                                                                                                                                                    ABK65967 standard; DNA; 26
                                                                                                                                    specific PCR primer #55.
                                                                                                                                               (first entry)
                                                                                                                                                                    ВÞ
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Producing sub-population of labeled nucleic differences in RNA profiles between several sources, using set of distinct gene specific

specific

primers.

acids, useful for analyzing different physiological

WPI; 2002-314699/35. Chenchik A, Jokhadze G, 21-MAY-1997; 05-JAN-1999;

97US-00859998 99US-00225928

(CLON-)

CLONTECH LAB

Bibilashvilli

Example 3; SEQ ID NO 55; 11pp; English.

The invention relates to producing a sub-population of labeled nucleic

cc source, with a pool of 50 distinct gene specific primers under suitable conditions to enzymatically generate sub-population of NAs, where each CC gene specific primer has a sequence complementary to a distinct mRNA, and CC each labeled NA is generated using a single gene specific primer. The CC useful for producing a sub-population of labeled NAs which is CC useful for analysing the differences in the RNA profiles between several CC different physiological sources, where the method comprises producing CC subpopulation of labeled NAs for the different physiological sources, CC comprising the populations for each physiological sources, CC differences in the population, where the comparison is preferably CC performed by hybridising the labeled NAs for each of the distinct CC surface of a substrate to produce a hybridistion is preferably associated with the Sources, and comparing the patterns for each of the sources, where CC differential gene expression assays are utilised in differential contains of diseased a normal tissue e.g. neoplastic a normal tissue, or different tissue or subtissue types. The present sequence is a human gene specific PCR primer used in the method of the invention. Note: The sequence data for this patent did not form part of the printed CC station, but was obtained in electronic format directly from USPTO or at http.wipo.seqdata.uspto.gov/sequence.html?DocID=635283981 acids (NAs) comprising contacting a NA sample from a physiological source, with a pool of 50 distinct gene specific primers under sui

Sequence 26 BP; 5 A; 6 C; 7 G; 8 T; 0 U; 0 Other;

밁 Ś Matches Query Match Best Local S 543 TTTCAGAGCCATGAGGATGCTTCTGC 568 26; _ Similarity TTTCAGAGCCATGAGGATGCTTCTGC 26 Conservative 0.8%; 0 Score 26; DB 1; Length 26; Pred. No. 62; Mismatches 0 Indels 0 0

RESULT 29 AAZ55590/c AAZ55590 standard; DNA; 27

15-SEP-2003 14-MAR-2000 (revised) (first entry)

Degenerate mammalian IL-5 antisense PCR primer 2, SEQ ID NO:136.

Interleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 ligand; CD154; interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline; granulocyte macrophage colony-stimulating factor; inhibitor; immune response; immunoregulation; tumour; cancer; autoimmune disease; vaccine;

Homo sapiens. Chimeric. Felis catus

WO9961618-A2

02-DEC-1999

28-MAY-1999; 99WO-US011942

29-MAY-1998; 98US-0087306P

(HESK-) HESKA

Sim G, Yang S, Dreitz MJ, Wonderling

WPI; 2000-072623/06

Nucleic acids encoding immunoregulatory proteins from cats or useful for treating or preventing e.g. tumors or autoimmune di

Example 5A; Page 106; 264pp; English

1

The invention relates to canine interleukin-4 (IL-4), canine or feline CP Plt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40) CC ligand), canine IL-5, canine IL-13, feline interferon-alpha (IPN-alpha) CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and colony-stimulating factor (GMCSF), and their associated nucleic acids, specific antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC used as vaccines for therapeutic or prophylactic regulation of an immune CC allergies, tumours, inflammation and graft rejection, and to increase the CC response from a co-administered antigen. The nucleotide sequences can claso be used for the recombinant production of a protein, while case sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug casesent pcR primers used in isolation, amplification and cloning of cDNAs encoding the immunoregulatory proteins of the invention.

(C) (Updated on 15-SEP-2003 to standardise OS field)

Sequence 27 BP; 3 A; 8 C; 3 G; 9 T; 0 U; 4 Other;

Query Match Best Local Matches 23; Similarity Conservative 0.8%; 4 Score 25.4; Pred. No. 7 Mismatches DB 1; 0 Length Indels 27; 0 Gaps 0

밁 ş 2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300 27 TGAGAATGAGGSCCAASMAAGRGTCAG 1

RESULT 30 AAT76224/c

AAT76224 standard; DNA; 25 ВР

12-SEP-1997 (first entry)

Human ILS antisense oligonucleotide HUMILSASS.

Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleu interleukin; 88

Synthetic.

WO9640162-A1

19-DEC-1996.

06-JUN-1996; 96WO-US009306

07-JUN-1995; 95US-00474497

(UYEC-) UNIV EAST CAROLINA.

돌

WPI; 1997-051871/05.

Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of subject.

5; Page 31; 71pp; English.

A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMILSASS specific for the human ILS. The method can be used to treat airway

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និក្ខិតិក្រុង និង

diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-

Query Match

Local

Similarity

100.0%;

Score 25; Pred. No.

;

Length 25;

0

Sequence 25 BP; 0 A;

14 C; 4 G; 0.8%;

7 T; 0 U; 0 Other;

airways

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RESULT 31

AAX54020/c

ID AAX54

AC AAX54

AC AAX54

AX AAX54

DT 05-JI

DE Human

XX Antina

XX Antina

XX Antina

XX Antina

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XX Antina

XX Pulin

XX Pulin

AX Autina

Ax Pulin

AX Autina

Ax Pulin

AX Autina

Ax
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Matches
The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX5512-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; brast cancer; lung cancer; pancreatic cancer; hepaticcellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human IL-5 antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX54020 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-1997;
09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prostate cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 49; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6
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98US-00093972.
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RESULT 32
AAA33464/c
ID AAA334
XX AAA334
XX AAA334
XX AAA334
XX Low ad
XX Human;
KW Human;
KW phosph
KW allerg
KW allerg
XX Low ad
XX Homo s
XX Homo s
XX Ing d
XX In
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The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthm respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
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                                                                                                                                                                                                                                                                                                                                                                                                              Page 409; 1343pp; English
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Pred. No.
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RESULT 33
AAF19586/c
ID AAF195
Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. Stop ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF19586 standard; DNA; 25 BP.
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                                                                                                                                                                                     WPI; 2000-679539/66.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human IL5 polynucleotide fragment #1153.
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The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base

Low adenosine (A) content antisense oligonucleotides which adenosine receptors during metabolism, useful e.g. for trea and respiratory obstructions.

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not trigger ng cancers

Claim 14; Page 208; 1592pp; English.

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(I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with CC lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adenosine receptors, bradykinin receptors, cytokines and crevous system (CNS) and peripheral nervous and non-nervous system creeptors, chefinesian, growth factors, vasoactive peptides and creceptors, binding proteins and malignancy associated proteins. The antisense oligonuclectides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, allergy(ies) and/or and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or and/or bransplantation respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CP), allergies (AR), pulmonary bypertension, emphysema, chronic obstructive pulmonary disease (COPD), hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary transplantation of the reasonate and antisense oligonucleotides used in the exemplification of the reasonate and antisense oligonucleotides used in the exemplification of
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Matches 25
                                                                                                       10-JUL-2000;
15-MAY-2001;
22-JUN-2001;
                                                                                                                                                                                                                                                                                                                              Huntington's disease; amyotrophic lateral sclerosis; stroke; spinal cord injury; ataxia; brain trauma; multiple sclerosis; acquired immunodeficiency syndrome; AIDS-dementia.
                                                                                                                                                                                                                                                                                                                                                                                      anticonvulsant; cerebroprotective; antiparkinsonian; vulnerary; immunosuppressive; microglia cell line; autoimmune disease; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
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WPI; 2002-148175/19
                                                                                                                                                                                  09-JUL-2001; 2001WO-IB001770
                                                                                                                                                                                                                                                           WO200204604-A2.
                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; ss; PCR; primer; interleukin-5; neuroprotective; nootropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human interleukin-5 sense PCR primer.
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                                                                       (UYBR-)
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2001US-00855468.
2001US-00887145.
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69;
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Disclosure; SEQ ID

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     RESULT 35
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                           Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; antisense gene therapy; respiratory; bronchoconstriction; lung allergy; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
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in culture,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genetically modified human microglia cell for treating neurodegenerative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human IL-5 antisense fragment no.1144.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-OCT-2003
Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                         24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                                                              31-OCT-2002
                                                                                                                                                                                                                                                                                           WO200285308-A2
                                                                                                                                                                                                                           23-APR-2002; 2002WO-US013135
                                                                       WPI; 2003-229219/22.
                                                                                                                                                                                                                                                                                                                                                                adenosine receptor
lung inflammation;
                                                                                                                                                       (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                              sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    555 GAGGATGCTTCTGCATTTGAGTTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25;
                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGATGCTTCTGCATTTGAGTTTG
                                                                                                     Li Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mprises demonstrable phagocytic properties, produces propersents surface antigens, and contains modified human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 4 A; 3 C; 8 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22; 46pp;
                                                                                                     ŗ
                                                                                                     Sandrasagra A,
L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                            respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 25;
Pred. No.
                                                                                                     Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25
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                                                                                                                       Pabalan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                       Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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0;

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RESULT 36
ABD19254/c
ID ABD192
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Matches
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Best Local Similarity
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                                                                                                                Nyce JW,
Miller S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hyportension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel pharmaceutical composition, where the composition in the composition of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a rolumnation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
pulmonary transplantation rejection; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human IL5 DNA fragment 1144.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 25
                                                                                                                                                                                                                                                                                                                   23-APR-2002; 2002WO-US013143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABD19254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                            24-APR-2001; 2001US-0286036P
                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200285309-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2764
                                                                                                    S
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                                                                                                                                                                                                  EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGGAGCAGGGACACAGGCAGGAGG
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                                                                                                          Li Y,
Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 0 A; 14 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
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                                                                                                             Sandrasagra A,
L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 25;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                   ŝ
                                                                                                                                           Katz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                              Pabalan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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0

Pharmaceutical composition for treating asthma,

has antisense

WPI; 2003-093058/08

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RESULT 37
AAT75363
ID AAT75
XX AAT75
XX AAT75
XX AAT75
XX CDNA
XX S8; II
KW S8; II
KW Cent:
XX Synt!
XX W097
XX W097
XX W097
XX PP 24-J
PR 26-J
PR 17-J
XX PA (GEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC compositing oligonucleotides, effective for alleviating composition (a) a first active agent, compositing adenosine controlled and inflammation, allergies and creducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, composition or hyposecretion, when administered to a mammal. The coligonucleotides are derived from a gene encoding or regulating controlled arget polypeptide associated with lung airway or lung composition or cancer and can be anti-sense to the corresponding mRNA. CC The invention also describes a kit, that comprises (a) a delivery construction or cancer and can be anti-sense to the corresponding mRNA. CC Instruction for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, an algesic, hypotensive, immunosuppressive and cytostatic activity, is a composition comprises oligo and is administered to reduce the production of the invention for a composition is useful for preventing or cc treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The cc pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction are associated conflammation, allergies, asthma, impeded respiration, respiratory changelantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to the milling breakdown of the milling breakdown of the milling breakdown of the conjunction and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 15;
                                       26-JAN-1996;
17-JUL-1996;
                                                                                                                                                                         WO9727284-A2
                                                                                                                                                                                                                                                                       ss; human;
                                                                                                                                                                                                                                                                                                         cDNA synthesis primer IL5-1.
                                                                                                                                                                                                                                                                                                                                                   24-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                             AAT75363 standard; cDNA;
                                                                                             24-JAN-1997;
                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                   central nervous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention describes
   (GENE-) GENELABS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGGAGCAGGGACACAGGCAGGAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGGAGCAGGACACAGGCAGGAGG 2788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 10522; 763pp; English
                                                                                                                                                                                                                                               RAD50; DNA repair; tumour rvous system; PCR; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                       96US-00592126
96US-00687080
                                                                                               97WO-US001299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0 A;
   TECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                             24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a novel composition (a)
                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 25; DB 1;
Pred. No. 69;
0; Mismatches
                                                                                                                                                                                                                                                 suppression; cancer; Septin-2;
amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               first active agent,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
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The primers AAT75354-T75378 were used to for cDNA synthesis in the method of the invention. Disclosed in the invention is human RAD50 (hRAD50) which is involved in DNA repair and has tumour suppression activity, and can be used to detect predisposition to, decrease the risk of or treat cancers, e.g. acute myeloid leukaemia, myelodysplastic syndrome, therapy related myelodysplastic syndrome, therapy related acute myeloid leukaemia, refractory anaemia or refractory anaemia with excess blasts. Also disclosed in this invention are human Septin-2 homologues which may be used as targets for cancer therapies and central nervous system directed treatment methods, and to measure the proliferative potential of selected cell types
                                                                                                                                                                                                                                                                                                                                                            Human tumour suppressor gene RAD50 - useful to detect predisposition decrease risk of and treat cancer, also Septin-2 homologues.
                                                                                                                                                                                                                                                                                                                Example 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-393672/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dolganov
                                                                                                                                                                                                                                                                                                                Page
                                                                                                                                                                                                                                                                                                                36; 195pp; English.
```

맑 Ś Query Match Best Local Matches Sequence 24 BP; 9 A; 7 C; 4 G; 4 T; 0 U; 0 Other; 1883 CACCAACTGTGCACTGAAGAAATC 1906 24; \vdash Similarity CACCAACTGTGCACTGAAGAAATC 24 Conservative 0.7%; 0, Score 24; Pred. No. Mismatches 76; DB 1; Length 24; 0, Indels 0 Gaps 0

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AAV59945
                                                                                                                                                                                                                                                                        RESULT 38
                                                                                                                                      03-SEP-1998.
                                                                                                                                                                        Synthetic.
                                                                                                                                                                                           Human analogue; yeast RAD50; Drosophila Sej
immunomodulatory activity; identification;
                                                                                                                                                                                                                                             AAV59945;
                                                                                                                                                                                                                                                          AAV59945 standard;
                                                                                                            27-FEB-1997;
                                                                                                                         27-FEB-1997;
                                                                                                                                                    WO9838306-A1
                                                                                                                                                                                     interluekin; IL; PCR primer; ss.
                                                                                                                                                                                                                PCR primer IL5-1 used to amplify interleukin cDNA.
                                                                                                                                                                                                                               25-NOV-1998 (first entry)
                                                                                                                                                                 Homo sapiens
                                                                                                                         97WO-US003159
                                                                                                            97WO-US003159.
                                                                                                                                                                                                                                                          DNA;
                                                                                                                                                                                                                                                          24
                                                                                                                                                                                                                                                          쁑
                                                                                                                                                                                             Septin-2; Acyl-CoA s
on; activated T-cell;
                                                                                                                                                                                             synthetase;
l; cytokine;
```

PCR primers AAV59945-46 were used to identify cDNA encoding human cytokine interleukin (IL) from different cDNA pools, to provide an estimate of the degree to which the cytokine transcript is present was isolated from activated T-cells, and converted to cDNA prior to

mRNA

Novel RAD50

human immunomodulatory poly:peptide(s) - or Drosophila Septin-2 proteins.

have

homology to the yeast

WPI; 1998-481207/41.

Dolganov

(GENE-)

GENELABS TECHNOLOGIES

Example 1;

Page

27;

155pp; English.

amplification.

The specification describes sequences encoding human

```
RESULT 39
AAT50760
ID AAT50
XX AAT50
XX AAT50
XX Cytok
KW Cytok
KW Lives
KW Lives
KW Inmun
KW antib
KW secre
XX Synth
PN W0970
XX W0970
XX W14-U1
PR 14-U1
PR 27-O0
XX WPI;
XX W14-U1
PR 27-O0
XX WPI;
XX W0970
XX WPI;
XX WO16
CC The (CC the (CC subu)
CC Subu
CC Toff C
CC frepr
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Best Local Simi
Matches 24;
                    The sequences given in AAT50760-69 are primers which were used to amplify the sequences encoding owine interleukin-5 (IL-5), and interleukin-12 (IL-12)-35, kD subunit (partial and full length sequence) and the 40 kD subunit. Owine IL-5 or IL-12 are used to treat and/or prevent infections in livestock (esp. cows and sheep), particularly where the animals are stressed, e.g. during transport. IL-5 and IL-12 can also be used as adjuvants in vaccines for veterinary use (partic. weakly immunogenic subunit or synthetic peptide vaccines). They may also be used to treat cancer, immunosuppression and allergy, to enhance/suppress the reproductive system and to promote growth or early maturity. Optionally interleukin can be delivered from constructs or delivery cells and antibodies are useful in enzyme immunoassays for rapid diagnosis of infection. The interleukins are immunopotentiators, especially IL-5 promotes growth of early haematopoietic progenitor cells and generation of from the calls from the constructs or delivered and constructs and constructs are described to the calls from the constructs or cells and generation of a constructs or cells and generation and constructs are constructed and construction and construc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               analogues of the yeast RAD50, the Drosophila Septin-2 and Acyl-CoA synthetase. The proteins have immunomodulatory activity. The nucleic acids and proteins can be used to identify activated T-cells in a sample population. They can also be used to isolate and identify sequences encoding other proteins or other compounds having immunomodulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunosuppression; allergy; reproductive system; growth; early maturity; antibody; diagnosis; immunopotentiator; PCR; amplify; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ovine IL-5 gene forward primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT50760 standard; cDNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-JUN-1995;
27-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytokine; ovine; sheep;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CSIR ) COMMONWEALTH SCI & IND RES ORG.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1883 CACCAACTGTGCACTGAAGAAATC 1906
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 9
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95AU-00006244.
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thymocytes,
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Pred. No.
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      also it stimulates production and
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RESULT 40
ABS52410/G
ID ABS522
XX ABS52
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YX MOUSE
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                  The invention relates to comparing one or more nucleic acid targets converting two or more samples comprising converting two or more complex connected acid samples into a single collection of normalised target converting two or more complex converting to the complex converting at the converting and the second and the second differentiation domain to the first nucleic acid target is present in the second converting at the converting at the converting and the second converting at the converting and the second converting at the converting and the second converting and the converting and the second converting and the converting and the sample mixture by a process comprising at the converting and the converting and the converting and conve
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Best Local S
Matches 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Comparing one or more nucleic acid targets within two or more samples useful for the competitive analysis of nucleic acid samples regardless their abundance, by competitive population (containing the target molecules) normalization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABS52410;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      secretion of IgM and IgA (in synergism with bacterial endotoxin). IL-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 63; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-AUG-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    roduction of gamma-interferon by, and proliferation of, T an increases the (non-)specific cytolytic lymphocyte response. onstructs can also be used for in vitro production of IL-5 o
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100.0%; Pr/
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84;
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nucleic acids complementary

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RESULT 41
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Best Local S
Matches 23
                                                                                                                                                    Comparing one or more nucleic acid targets within two or more san hybridizing the samples into target fractions then amplification nucleic acid target quantification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR; primer; nucleic acid
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                                                                                                                                                                                                                                                                               (AMBI-) AMBION INC
                                                                                                                                                                                                                                                                                                            31-JAN-2001; 2001US-0265692P
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                                                                                                                                                                                                                                               Brown
                                                                                                                                                                                                                                                                                                                                                                                                                                                               target detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid amplification; ss; interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer #2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
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                                                                                                                                                                                 samples
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This invention relates to a novel method for comparing one or more nucleic acid targets within two or more samples. The method comprises preparing a sample mixture by obtaining at least a first sample and a second sample, each potentially with at least a first nucleic acid target and mixing the first nucleic acid sample and the second nucleic acid sample to create a sample mixture. The method of the invention is useful for fractionating nucleic acid samples into target fractions then using

Best Local Matches 2 Query Match

Similarity 23; Conserv

0.7%; nilarity 95.8%; Conservative

Pred. No. 1e+

1e+02;

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22.4;

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27;

Indels

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Sequence

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Page 53;

84pp;

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RESULT 42
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Best Local S
Matches 23
                     This artificial sequence is an oligomer containing the palindromic sequence from human interleukin 5 (hIL-5) promoter. These oligomers can be used as inhibitors of transcription of cytokines. They can be used in the therapy of a disease associated with excessive production in vivo of a cytokine, the gene for which corresponds to the palindrome-containing sequence in (I) in its 5'-non-coding region, or which can be alleviated by reducing the production in vivo of the cytokine (claimed). In particular, the cytokine may be interleukin-5 (II-5) and the associated disease is asthma or the cytokine may be tumour necrosis factor- alpha and the associated disease is rheumatoid arthritis (claimed). They can also be used for treating e.g. allergy, chronic obstructive airways disease, inflammation, autoimmune diseases, cancer, angina, fibrossis, wound scarring, septic shock syndrome or excessive cellular proliferation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Artificial from hIL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acids amplification to quantitatively assess target within each fraction. This method as compared facilitates the analysis of more target sequences to acid profiles of limited tissue samples. The present a PCR primer used in the method of the invention
                                                                                                                                                                                                                                         New double stranded DNA oligomers, transcription for treating, e.g. a
                                                                                                                                                                                                                                                                                                                                                                 22-JAN-1998;
11-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                Disclosure; Page 11; 33pp; English.
                                                                                                                                                                                                                                                                                  WPI; 1999-458690/38
                                                                                                                                                                                                                                                                                                          Eagles PAM,
                                                                                                                                                                                                                                                                                                                                                                                                          20-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            arthritis; inhibition; c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence of promoter.
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98GB-00024794.
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e.g. asthma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation;
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to prior art meth
determine nucleic
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arthritis
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RESULT 43
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RESULT 44
AAQ57194
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Best Local Similarity
Matches 22; Conserv
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07-DEC-1992;
07-DEC-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Interleukin-5; specific; cleavage; target RNA; protein; expression; inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention psoriasis; asthma; inflammatory diseases; restenosis;
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26-JUL-1994
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                                                                                                                                                                                                                                                                                                   Enzymatic RNA molecules which cleave mRNA - used to treat or prevent inflammatory, arthritic, stenotic or cardiovascular diseases or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9402595-A1
  25-MAR-2003
                    AAQ57194;
                                        AAQ57194 standard; mRNA;
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                                                                                                                                                                                                                                                                                                                                                                                             19-JAN-1993;
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92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
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AAQ74032/c
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Human interleukin 5

primer. entry)

Interleukin

5

primer; mRNA;

specificity; pharmaceutical;

29-JAN-1996 AAQ74032;

(first

05-NOV-1993;

93JP-00275852

16-MAY-1995.

AAQ74032 standard;

DNA;

22 ВР

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Matches 22
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07-DEC-1992;
07-DEC-1992;
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                                                                                                                             This is an IL-5 mRNA target sequence (nucleotide no. 158) of an enzymat RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concn. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of action is higher. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                             Enzymatic RNA molecules which cleave mRNA - used to treat or inflammatory, arthritic, stenotic or cardiovascular diseases
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                                                                                                                                                                                                                                                     conditions.
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                TACTCATCGAACTCTGCTGATA 687
                                                                                                                                                                                                                                                                                                                                 , MS
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92US-00987132.
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92US-00989849.
93US-00008895.
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                                                                                AAQ74031-Q74032 are primers used for the amplification of human interleukin-5 (AAQ74056). They are used specifically for the deland isolation of this sequence. The primers have the advantage esensitivity and reliability and are useful in the pharmaceutical
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Pred. No.
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AAV01432
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                                                                                                                                                            RESULT 48
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Best Local S
Matches 22
                                                                                                                                                                                                                                                                                                         The present sequence is human CLEO, which was used as control in an assay of human interleukin-5 (hII-5) promoter palindromic regulatory element (PREI) activity. PREI inhibits the activity of the hII-5 promoter and therefore II-5 expression. PREI can be used to modulate II-5 activity by acting on the corresponding region of the hII-5 promoter, especially in cases of asthma and eosinophilia or in immunocompromised subjects. PREI specifically inhibits transcription from the II-5 promoter, as no such
                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                              Example
                                                                                                                                                                                                                                                                                                                                                                                                                              gene
                                                                                                                                                                                                                                                                                                                                                                                                                                       promoter -
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                                                                                                                                        AAT47000 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-MAR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TVWT-) TVW TELETHON INST CHILD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-MAR-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                            expression,
                                                                                                                                                                                                                450
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                                                                                                                                                                                                                                                                                                                                                                                                                           acid sequence that inhibits activity of the interleukin-5 r - and proteins that interact with this sequence to modul pression, for treating asthma, eosinophilia or immune-comp
                                                                                                                                                                                                                                                                                                                                                                                              4.
                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                               GAAATTATTCATTTCCTCAAAG 471
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                                                                                                                                                                                                                                                                                                genes encoding
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Pred. No.
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92;
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PCR; polymerase chain reaction; primer; amplify; beta-actin; IL-2; IL-4; interferon-gamma; interfeukin-2; peripheral blood mononuclear cell; IL-5; granulocyte macrophage colony stimulating factor; GM-CSF; cytokine; PBMC; CD8 cell; T-cell; cell mediated immunity; cytotoxic; CD45RA; IL-10; HIV; surface marker; naive T-cell; thymus; proliferative response; antibody; cognate antigen; immuno-compromised; cancer; viral infection;

Interleukin-5

primer

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RESULT 49
AAT76225/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                    have recently emigrated from the thymus and have a predominantly composition of the compate antigens for the first time. These primers can be used in the method of the invention. The method of the invention is for evaluating the efficacy of a drug to stimulate the production of naive T-cells. The method comprises obtaining a sample containing peripheral blood monnuclear cells from a subject. A suitable dose of a drug is then administered before a second sample is obtained. The T-cell populations are then isolated from the samples. The number of naive T-cell surface population is then determined by reactive with naive T-cell surface proteins. If the number of naive T-cell surface proteins. If the number of finive T-cell sidentified as being effective. The method can be used to identify naive T-cell count elevating drugs, particularly in immuno-compromised subjects, e.g. HIV positive subjects, cancer patients or individuals with viral infection or autoimmune disease
                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT46992-T47005 represent amplification primers for DNA encoding cytokines from CDB T-cells. This sequence and AAT47001 are primers for the interleukin-5 gene. CDB cells provide cell mediated immunity through both cytotoxic and suppressor mechanisms. The naive subset of CDB cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Detection of naive {\bf T} cells in subjects - useful to identify production stimulating drugs for immunocompromised subject treatment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                autoimmune
                                                           Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin; ss
                                                                                                                                                                                                     AAT76225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expresses the CD45RA surface marker, and make a relatively poor cytokine response after T-cell receptor stimulation. Naive T-cells are cells which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 23; 56pp; English
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WO9640162-A1
                             Synthetic
                                                                                                         Human IL5 antisense oligonucleotide HUMIL5AS6.
                                                                                                                                          12-SEP-1997
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22; Conserv
                                                                                                                                                                                                                                                                                                    GCTAGCTCTTGGAGCTGCCTAC 600
                                                                                                                                                                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                   standard; DNA;
                                                                                                                                                                                                                                                                                  GCTAGCTCTTGGAGCTGCCTAC 22
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                                                                                                                                                                                                                                                                                                                                                                                                           0 Other;
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Best Local S
Matches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMIL5AS6 specific for the human IL5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby recenting adenosine-induced bronchoconstriction in patients with hyperreactive airways
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Treatment of airway diseases such as asthma - adenosine-free antisense oligo:nucleotide to a subject.
                                                                                                                                                                      acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary constriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis
                                                                                                                                                                                                                                                            Antisense oligonucleotide; multiple target; antisense treatmimpaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22 BP; 1 A;
17-SEP-1997;
09-JUN-1998;
                                                                                                                                                           prostate cancer; ss.
                                                                                                                                                                                                                                                                                                                      Human IL-5 antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                  05-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                          AAX54021 standard;
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                                          17-SEP-1998;
                                                                                                                               Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAGAGGAAGCCAGAAACCCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 31; 71pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                  (first entry)
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97US-0059160P
98US-00093972
                                           98WO-US019419
                                                                                                                                                                                                                                                                                                                                                                                                            DNA; 22
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to airway epithelium of
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                                                                                                                                                                                                                                                                                            treatment;
                                                                                                                                                                            metastasis;
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Y PRANCE ON THE REPORT OF THE PROPERTY OF THE 
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Best Local S
Matches 22
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                                                                                                                                                                                                                                                                                                                                                                                                        Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antisthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e. colon cancer, breast cancer, lung cancer, pancreatic cancer, colon cancer, breast cancer, lung cancer, melanoma, hepatic metastases, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, well as all types of cancers which may metastasize or have metastasized well as all types of cancers which may metastasize or have
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-229400/19.
                                03-AUG-1998;
                                                                                                  03-AUG-1999;
                                                                                                                                                                       24-FEB-2000.
                                                                                                                                                                                                                                            WO200009525-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Low adenosine antisense oligonucleotide SEQ ID NO:1154.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA33465 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The specification describes antisense oligonucleotides (AAX52869-X55271)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity
22; Conserv
                                                                                                                                                                                                                                                                                                                                                                                  leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGAGGAAAGCCCTC 3018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                  99WO-US017712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 A;
                                                                                                                                                                                                                                                                                                                                                                                  lymphoma; carcinoma; metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 22;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ore 22; DB 1; Length 22; red. No. 92; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONS reduces side effects. The A-containing ONS breast down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present the nucleotide sequences given in the sequence listing from the present the instruction, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:1 to 1680 (AAA33233 to AAA3392) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a new composition comprising an antisense oligonuclectide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired altways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                   up with
listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 18; Page 409; 1343pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-205971/18
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밁 S Query Match Best Local S Matches 22 2997 AGAGAGGAAGCCAGAAACCCTC 3018 22 Similarity Conservative 100.0%; 0.7%; Score 22; <u>,</u> Mismatches DB 1; Length 22; 92; 0 Indels 0, Gaps 0

Sequence

22 BP; 1

A; 6 C; 6 G; 9 T; 0 U; 0 Other;

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RESULT 52
AAF19587/c
                                          AAF19587 standard; DNA; 22 BP
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polynucleotide fragment #1154.

14-MAR-2001 AAF19587

(first entry)

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive cancer; ss. pulmonary n rejection; bronchitis;

Sand Strains

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RESULT 53
AAF25544
ID AAF25
XX
AC AAF25
XX
DT 04-AF
DX
DE Multi
XX
Multi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and cativating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system receptors, combitters, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders and/or bronchoconstriction and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or
                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                     condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200062736-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-679539/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-MAR-2000; 2000WO-US008020
 Multiplex PCR; detection; amplification; probe; PIRS; leukemia;
                                  Multiplex PCR primer IL-5-exup.
                                                                         04-APR-2001
                                                                                                                                               AAF25544 standard;
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22 BP; 1 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes low adenosine (A) content antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 14; Page 208; 1592pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYEC-) UNIV EAST CAROLINA (NYCE/) NYCE J W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                        fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                         2997 AGAGAGGAAGCCAGAAACCCTC 3018
                                                                                                                                                                                                                                          22
                                                                                                                                                                                                                                                                                                              22;
                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                              Conservative
                                                                       (first entry)
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                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                   6 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                 0.7%;
                                                                                                                                               22
                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                Score 22;
Pred. No
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                                                                                                                                                                                                                                                                                                                                                 Length 22;
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                                                                                                                                                                                                                                                                                                              Gaps
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Query Match
Best Local S
Matches 22
                                                                                 This invention describes a novel method for the detection of products of a nucleic acid (NA) amplification reaction (AR) using at least 2 primers where one of the primers (I) contains a 5'-homo-tail sequence, a probe binding sequence designated a primer-integrated reporter sequence (PIRS) and a sequence specific for the NA to be amplified, and a labeled probe (III). The method is used for the diagnosis of diseases, especially leukemia, meningitis, encephalitis or cytokine response. The need for expensive probe oligonucleotide additives is avoided
                                                                                                                                                                                                                                            Detecting products of nucleic acid amplification, useful for diagnosis of e.g. leukemia, comprising two primers, one containing a primer-integrated reporter sequence, and labeled probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer-integrated reporter sequence; meningitis; encephalitis;
                                                           Sequence 22 BP; 7 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                     Example 3; Page 12; 22pp; German.
                                                                                                                                                                                                                                                                                                        WPI; 2001-072123/09.
                                                                                                                                                                                                                                                                                                                                     Repp R,
                                                                                                                                                                                                                                                                                                                                                                                                             02-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                         02-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DE19925448-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytokine response; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                  (REPP/) REPP R. (RASC/) RASCHER
                Similarity
                                                                                                                                                                                                                                                                                                                                      Rascher W;
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             99DE-01025448
                                                                                                                                                                                                                                                                                                                                                                                                                                          99DE-01025448
             0.7%;
 0;
                Score 22;
Pred. No.
   Mismatches
                              DB 1;
   0
                              Length 22;
    Indels
   0,
                                                                                                                                                           t 2 primers,
 Gaps
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                                                                                                                                                                                                                                                                  RESULT 54
                                                                                                                                                  Multiplex PCR; detection; amplification; probe; PIRS; leukemia; primer-integrated reporter sequence; meningitis; encephalitis;
                                                                                                                                                                                 Multiplex PCR primer IL-5-exdo
                                                                                                                                                                                                      04-APR-2001
                                                                                                                                                                                                                          AAF25545;
                                      02-JUN-1999;
                                                          02-JUN-1999;
                                                                               07-DEC-2000
                                                                                                                      Unidentified.
                                                                                                                                           cytokine response;
                                                                                                                                                                                                                                               AAF25545 standard;
         (REPP/) REPP R. (RASC/) RASCHER
                                                                                                  DE19925448-A1
                                                                                                                                                                                                                                                                                                              1909 TCAGGGAATAGGCACACTGGAG 1930
                                                                                                                                                                                                                                                                                                  TCAGGGAATAGGCACACTGGAG 22
                                                                                                                                                                                                      (first entry)
                                        99DE-01025448
                                                            99DE-01025448
                                                                                                                                                                                                                                                DNA;
                                                                                                                                           primer; ss
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Rascher

Detecting products of nucleic scid amplification, useful for diagnosis e.g. leukemia, comprising two primers, one containing a primer-integrat reporter sequence, and labeled probe.

a primer-integrated

Example

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Page 12; 22pp; German

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Best Local (
                                                                                                                                             Nyce JW,
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel method for the detection of products of a nucleic acid (NA) amplification reaction (AR) using at least 2 primers, where one of the primers (I) contains a 5'-homo-tail sequence, a probe binding sequence designated a primer-integrated reporter sequence (PIRS) and a sequence specific for the NA to be amplified, and a labeled probe (III). The method is used for the diagnosis of diseases, especially leukemia, meningitis, encephalitis or cytokine response. The need for expensive probe oligonucleotide additives is avoided
                                                                                                                                                                                                                                                                                                                                      Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                   Pharmaceutical composition for treating ailments associated respiration, has oligo(s) antisense to specific gene(s) or incorresponding RNAs, and glucocorticoid or non-glucocorticoid
                                                                                                                       WPI; 2003-229219/22.
                                                                                                                                                                                                      24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                               23-APR-2002; 2002WO-US013135
                                                                                                                                                                                                                                                        31-OCT-2002
                                                                                                                                                                                                                                                                               WO200285308-A2
                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                Human IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABZ95281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                  (EPIG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2178
                                                                                                                                                                                                                                                                                                                              inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22; Conserv
                                                                                                                                                                                  EPIGENESIS
                                                                                                                                           Li Y, Sa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGGTGTAATGAACACCGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTGGTGTAATGAACACCGAGT 1
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                                                                                                                                                                                                                                                                                                                                                                                                               antisense fragment no.1145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.7%;
llarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
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                                                                                                                                             Sandrasagra A,
L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                  PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6 C; 4 G; 6 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 22;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2199
                                                                                                                                             Katz
S;
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                                                                                                                                                         'n
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92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 Other;
                                                                                                                                                         Pabalan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 22;
                                                                               s associated with impaired gene(s) or its
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                        Aguilar
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Human

IL5 DNA

fragment 1145.

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CC S' and 3' intron-exon junctions, or regions within 2-10 nucleotides of CC junctions of genes encoding a polypeptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an CC antiinflammatory steroid and ubiquinone. A composition of the invention CC immunosuppressive, antiallargic, antiasthmatic, hypotensive, CC immunosuppressive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or CC preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapeutic respiratory effect of an CC antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine CC receptor, producing bronchodilation, increasing levels of biquinone or CC lung surfactant in a subject's tissue, or treating bronchoconstriction, CC Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO CC at ftp.wipo.int/pub/published_pct_sequences
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Sequence 22 BP; 1 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

Query Match Best Local S Matches 22 Similarity Conservative 0.7%; 0 Score 22; Pred. No. Mismatches DB 1; 92; 0 Length 22; Indels 0 Gaps 0

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ABD19255/c
                                                                  RESULT 56
                                            ABD19255
                                                                                                                        2997 AGAGAGGAAAGCCCTC 3018
                                                                                                     22
                                            standard;
                                                                                                     AGAGAGGAAGCCAGAAACCCCTC 1
(first
                                              DNA;
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Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; bronchitis; pulmonary transplantation rejection; ds.

Homo sapiens.

WO200285309-A2

31-OCT-2002

23-APR-2002; 2002WO-US013143

2001US-0286036P

(EPIG-) EPIGENESIS PHARM INC

Nyce JW, Miller S ŝ Li Y, Tang ŗ Sandrasagra A, L, Shahabuddin , Katz. Pabalan Aguilar

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, an bronchodilating agent. ç

Claim 15; SEQ ID NO 10523; 763pp; English

The invention relates to a novel first active agent comprising an

comprising

an

pharmaceutical oligonucleotide

composition, antisense to

which

hae

steroid

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Disclosure;

SEQ ID NO 10523; 872pp;

English.

ubiquinone

4.

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RESULT 57
AAQ86376
ID AAQ8
ID AAQ8
XX AAQ8
AC AAQ8
AC AAQ8
DT 25-y
DT 05-I
XX Pri
AC Int
XX Pri
KW P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC expression of a target polypeptide associated with lung alivary or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery composition also describes a kit, that comprises: (a) a delivery composition as antiallergic, antiinflammatory, antiasthmatic, comprises: (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition comprises: (c) analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The composition and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, respiratory composition, allergies, asthma, impeded respiration, respiratory composition, allergies, asthma, impeded respiration, respiratory composition, allergies, action, bulmonary transplantation respection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to the oligonacleotides into products that free adenosine into the system content of the anti-sense oligos corresponding to the oligonacleotides into products that free adenosine into the system content of the anti-sense oligos corresponding to the oligonacleotides into products that free adenosine into the system content of the anti-sense oligonacleotides into products that free adenosine into the system content of the content of the system content of the content of the system content of the content of the content of the system content of the content of the system content of the content of the content of the system content of the 
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Best Local S
Matches 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B-cell; T-cell; thymus; liver; tissue implant; immunity; monocyte; my peripheral lymphoid compartment; pathogenesis; beta-2 microglobulin; peripheral blood mononuclear cell; spleen; lymph node; interleukin; tumour necrosis factor; leukemia inhibitory factor; granulocyte; macrophage; colony stimulating factor; bone marrow; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primer; PCR; amplification; human; cytokine gene expression; HIV; mouse; B-ceil; T-cell; thymus; liver; tissue implant; immunity; monocyte; model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAR-2003
05-DEC-1995
                                                                                                                 28-SEP-1993;
02-JUN-1994;
                                                                                                                                                                                                                               28-SEP-1994;
                                                                                                                                                                                                                                                                                                          06-APR-1995
                                                                                                                                                                                                                                                                                                                                                                                 WO9509235-A1
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22; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  detection PCR primer #1 in BCTD-huBM mice.
                                                                                                              93US-00127880.
94US-00252773.
                                                                                                                                                                                                                               94WO-US010957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 22;
Pred. No.
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allergies and
(A) or (A) receptors,
Temmal. The
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(YESH) UNIV YESHIVA EINSTEIN COLLEGE

RNA was extracted from genital lesions, reverse transcribed to produce

Disclosure; Page 14; 32pp; English.

or tumours.

immuno:therapy

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RESULT 58
AAT38974
ID AAT38
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Primers AAQ86362-83 and AAQ87677-82 were used to detect the expressivarious cytokines genes in HIV infected B-cell, T-cell deficient (BCT mice which have been transformed with human thymus, liver tissue and marrow implants (BCTD-huBM mice). These mice are immune-deficient for murine B- and T-cells but can express human immunity cells such as T-cells and monocytes in their peripheral lymphoid compartments. These are useful as models for the pathogenesis of human disease, e.g. for assaying the dissemination of HIV. The primers are used to assay the effect of HIV on cytokine gene expression e.g. as a model for human patients with HIV. The primers AAQ86376-7 are used to detect the expression of the interleukin-5 gene, using cDNA derived from mRNA extracted from the long bones of BCTD-HuBM mice. (Updated on 25-MAR-2 to correct on field ')
                                                                                                                                                                                                                                                                                                                              Cytokine; expression profile; genital wart; interleukin 12; IL-12; tumour regression; adjuvant; polymerase chain reaction; PCR; condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; anogenital; cutaneous; laryngeal; oesophageal; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B-cell, T-cell deficient assaying pathogenesis of
                                                                Use of interleukin-12 as a vaccine adjuvant
                                                                                                                                                                                                                                                26-SEP-1996.
                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT38974 standard;
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                                                                                                          WPI; 1996-442947/44.
                                                                                                                                   Stanley MA,
                                                                                                                                                                                           22-MAR-1995;
                                                                                                                                                                                                                     22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                     Interleukin IL-5 5' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                29-MAY-1997
                                                                                                                                                               (UYCA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   577 TTGCTAGCTCTTGGAGCTGCC 597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -
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                                                                                                                                    Scarpini
                                                                                                                                                               CAMBRIDGE TECH
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                                                                                                                                                                                           95GB-00005784.
                                                                                                                                                                                                                      96WO-GB000686
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; 6 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
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                                                               to treat papilloma virus-associated lesions - with papilloma virus antigen for immuno:therap
                                                                                                                                    ဌ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BTCD) chimeric mice - useful human disease e.g. HIV-1, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>,</u>
                                                                                                                                                                 SERVICES LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        no detect the expression of T-cell deficient (BCTD)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Updated on 25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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efficacy
                                                                                                                                                                                                                                                                                                                                                 HPV16; HPV18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 These mice
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RESULT 59
AAV01427
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Matches 21; Conserv
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The present sequence is the human interleukin-5 (hIL-5) promoter wild type palindromic regulatory element (will), which inhibits the activity of the hIL-5 promoter and therefore IL-5 expression. wtPREI can be used to modulate IL-5 activity by acting on the corresponding region of the hIL-5 promoter, especially in cases of asthma and eosinophilia or in immunocompromised subjects. wtPREI specifically inhibits transcription from the IL-5 promoter, as no such sequence is present in genes encoding
                                                                                                                                                                                                                                                                                                                                       Nucleic acid sequence that inhibits activity of the interleukin-5 promoter - and proteins that interact with this sequence to modulate IL-5 gene expression, for treating asthma, eosinophilia or immune-compromised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; inter
inhibition;
                                                                                                                                                                                                                                                 Example 4; Page 14; 50pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-470871/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sanderson CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-MAR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interleukin-5; IL-5; palindromic regulatory element; promoter;
rion; modulation; asthma; eosinophilia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 ATGAGGATGCTTCTGCATTTG 21
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ilarity 100.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mordvinov VA;
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                                                                                                                                                                                                                                                    English.
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Pred. No.
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0 Other

RESULT 61 AAT75364/c ID AAT753 XX AC AAT753

AAT75364 standard; cDNA; 21

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RESULT 60
AAT76221/c
ID AAT762
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                                             Matches
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Best Local :
                                                                                                                                               A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMIL5AS2 specific for the human IL5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON,
                                                                                                                                                                                                                                                                                            Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                          Sequence
                                                                                                                           its liberation upon antisense degradation is prepreventing adenosine-induced bronchoconstriction
                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT76221;
                                                                                                                                                                                                                                                                                                                               WPI; 1997-051871/05
                                                                                                                                                                                                                                                                                                                                                    Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                   07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-DEC-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human IL5 antisense oligonucleotide HUMIL5AS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT76221 standard;
                                                                                                                                                                                                                                                                                                                                                                            (UYEC-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9640162-A1
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                    522 GCCAAAGGCAAACGCAGAACG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21;
                                                                                                                                                                                                                                                        5; Page 31; 71pp; English.
21
                                             l Similarity
21; Conserv
                                                                                                                                                                                                                                                                                                                                                                            UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                           21
                                                                                                                 airways
GCCAAAGGCAAACGCAGAACG
                                                                                          B₽;
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                                             Conservative
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                                         100.0%; F1
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                                             Score 21; DB; Pred. No. 1e+
0; Mismatches
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Pred. No.
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                       542
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                                                                                          T; 0 U; 0 Other;
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                                                                    DB 1; Length 21;
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                                                         1e+02;
                                                                                                                                      prevented,
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                                              Indels
                                                                                                                            patients
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                                                                                                                             with hyper-
                                              Gaps
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AAVS9946/c
ID AAVS99
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AC AAVS99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 62
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The primers AAT75354-T75378 were used to for cDNA synthesis in the method of the invention. Disclosed in the invention is human RAD50 (hRAD50) which is involved in DNA repair and has tumour suppression activity, and can be used to detect predisposition to, decrease the risk of or treat cancers, e.g. acute mysloid leukaemia, myslodysplastic syndrome, therapy related myslodysplastic syndrome, therapy related acute mysloid leukaemia, refractory anaemia or refractory anaemia with excess blasts. Also disclosed in this invention are human Septin-2 homologues which may be used as targets for cancer therapies and central nervous system directed treatment methods, and to measure the proliferative potential of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ss; human; RAD50; DNA repair; tumour suppression; cancer; Septin-2;
central nervous system; PCR; primer; amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human tumour suppressor gene RAD50 - useful to detect predisposition decrease risk of and treat cancer, also Septin-2 homologues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1997-393672/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-JUL-1997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-DEC-1998
                                                                                                                                                                                                                   Human analogue; yeast RAD50; Drosophila Septin-2; Acyl-CoA synthetase; immunomodulatory activity; identification; activated T-cell; cytokine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1;
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17-JUL-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9727284-A2
        03-SEP-1998
                                                         WO9838306-A1
                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                     PCR primer IL4-2 used to amplify interleukin cDNA
                                                                                                                                                                                                                                                                                                                                                           25-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV59946 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       selected cell types
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GENE-) GENELABS
                                                                                                                  Homo sapiens
                                                                                                                                                                                                 interluekin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2181 GGTGTAATGAACACCGAGTGG 2201
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTGTAATGAACACCGAGTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96US-00592126.
96US-00687080.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TECHNOLOGIES INC.
                                                                                                                                                                                               activity; ident
PCR primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Other;
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                                                            Query Match
Best Local S
Matches 21
                                                                                                                                                                      amplification. The specification describes sequences encoding human analogues of the yeast RADSO, the Drosophila Septin-2 and Acyl-CoA synthetase. The proteins have immunomodulatory activity. The nucleic acids and proteins can be used to identify activated T-cells in a sample population. They can also be used to isolate and identify sequences encoding other proteins or other compounds having immunomodulatory
                                                                                                                                                                                                                                                                  PCR primers AAV59945-46 were used to identify cDNA encoding human cytokine interleukin (IL) from different cDNA pools, to provide an estimate of the degree to which the cytokine transcript is present. was isolated from activated T-cells, and converted to cDNA prior to
                                                                                                                           Sequence 21 BP; 4 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                  Novel human immunomodulatory poly:peptide(s) RAD50 or Drosophila Septin-2 proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 27; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-481207/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GENE-) GENELABS TECHNOLOGIES INC.
                          2181 GGTGTAATGAACACCGAGTGG 2201
21
                                                                              Similarity
 GGTGTAATGAACACCGAGTGG 1
                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97WO-US003159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97WO-US003159
                                                        0.7%; 5--
100.0%; Pr
                                                                              Score 21; DB 1;
Pred. No. 1e+02
                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                    - have homology to the yeast
                                                               0;
                                                                                           Length 21;
                                                                 Indels
                                                             ٥,
                                                               Gaps
                                                                                                                                                                                                                                                                                           mRNA
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RESULT 63
AAX54017/c AAX54017 standard; DNA; 21 ₽₽

0

Human IL-5 antisense oligonucleotide fragment. AAX54017; (first entry)

Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;

acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis; Synthetic. prostate cancer; ss.

WO9913886-A1

25-MAR-1999

17-SEP-1997; 09-JUN-1998; 97US-0059160P 98US-00093972 98WO-US019419

(UYEC-) UNIV EAST CAROLINA.

Nyce

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CC directed against at least 2 mRNAs selected from target genes, coding and co-coding regions of RNAs corresponding to target genes, coding and codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases. CC conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases, pulmonary vasoconstriction, inflammation, including lung cc diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, cut asthma, allergies, asthma, impeded respiration, respiratory diseases (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, as well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and programs.
RESULT 64
AAA33461/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
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Best Local Similarity
Matches 21; Conserv
                                                                                                                                                                                                                                       Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary disease; ichronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA33461 standard; DNA;
                                                                 03-AUG-1998;
                                                                                                    03-AUG-1999;
                                                                                                                                                                         WO200009525-A2
                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                      Low adenosine antisense oligonucleotide SEQ ID NO:1150.
                                                                                                                                                                                                                                                                                                                                                                                                                                        28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides used in
                                (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the lungs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 GCCANAGGCANACGCAGAACG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCAAAGGCAAACGCAGAACG 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                  EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      including breast and prostate cancer
                                                                 98US-0095212E
                                                                                                  99WO-US017712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6 C; 6 G; 9 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
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Sequence

21

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0 Α,

o

C; 6 G; 9 T; 0 U; 0 Other;

185

the

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CC inclair acids involved in bronchoconstriction, allergies, and/or contributions in the treatment of diseases associated with inflammation, cytostatic and analgesic activities. The compositions are cuseful for the treatment of diseases associated with inflammation, compositions are cifects afflict the lungs of a subject. They can be used for treating ce.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthmat, cimpeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive carcinomas, and cancers which may metastasise to the lungs, including carcinomas, and cancers which may metastasise to the lungs, including crelease of deoxyadenosine which activates adenosine content of the constantion, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ cancer specifically claimed one from the previously named sequences. SEQ ID NO:1 to 185, but the sequences differ cancer specifically claimed one from the present invention on ont match corresponding SEQ ID NO:1 to 185, but the sequences differ cancer the previously named sequences. SEQ ID NO:1 to 180 (AAA32323 to AAA3392) are specifically claimed one from the present invention on ont match corresponding SEQ ID NO: sequences given in the sequences given in th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               asthma,
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Ś Matches Query Match Local 522 GCCAAAGGCAAACGCAGAACG 542 21 21; Similarity GCCAAAGGCAAACGCAGAACG 1 Conservative 0.7%; <u>,</u> Score 21; DB 1; Length 21; Pred. No. 1e+02; Mismatches 0, Indels 0 Gaps 0,

RESULT 65 밁 AAF19583 standard; DNA; 21 ВP

AAF19583;

14-MAR-2001 (first entry)

Human ILS polynucleotide fragment #1150.

AAF19583/c
ID AAF195
XX
AC AAF195
XX
DT 14-MAR
XX
Human
XX
Human
XX
Human
XX
Inmuno
XX
FOR
XW
Inmuno
XW
In Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation chronic obstructive pulmonary disease; pulmonary infection; l cancer; 88.

Homo sapiens

WO200062736-A2

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ABS52409
ID ABS52
XX ABS52
XX ABS52
XX ABS52
XX ABS52
XX MOUSE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CC (1) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. CC The antisense oligonucleotides and (1) can be used to down-regulate the CC expression and or activity of target polypeptides associated with CC lung/respiratory disorders and malignancies, such as stimulating and CC chemokines, endogenously produced specific and non-specific enzymes, CC binding proteins, adhesion molecules and their receptors, cytokines and CC chemokine receptors, adenosine receptors, bradykinin receptors, central craceptors, CNS and peripheral nervous and non-nervous system CC receptors, defensins, growth factors, varied proteins and cc receptors, binding proteins and malignancy associated proteins. The CC antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or CC condition selected from pulmonary vascocinstriction, inflammation, callergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                   Mouse; ss; PCR; primer; interleukin-5; IL-5; diferentiation domain; competitive population normalisation; nucleic acid quantitation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes low adenosine (A) content antisense olioonucleotides and compositions (I) comprising them. In the antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 14; Page 208; 1592pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-679539/66
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-APR-1999;
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  ds sh
                                                                                                Mouse Interleukin 5,
                                                                                                                                                                                  ABS52409
                                                                                                                                                                                                                        ABS52409 standard; DNA; 21
                                                                                                                                          15-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                   522 GCCAAAGGCAAACGCAGAACG 542
                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 0 A; 6 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000WO-US008020.
                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                          0.7%;
                                                                                                IL-5,
                                                                                                                                                                                                                        98
                                                                                                PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                          Score 21; DB 1; Length 21; Pred. No. 1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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672 TCGAACTCTGCTGATAGCCAA 692

21

Query Match Best Local S Matches 21

Local Similarity

0.7%;

Score 21; DB 1; Pred. No. le+02;

Length 21; Indels

Conservative

0;

Mismatches

0

0

Gaps

0

Sequence 21

B₽;

6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

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CC targets in the original sample. The method comprises: a) obtaining at CC least a first nucleic acid target; (b) preparing at least a first nucleic acid target; (c) preparing at least a first nucleic acid target (d) preparing at least a first nucleic acid target (c) mucleic acid sample by appending at least a first nucleic acid target (c) mucleic acid target of the first sample); (c) preparing at least a second target nucleic acid sample (if the first nucleic acid target is present (c) sample by appending at least a second target in present (c) second sample; (d) mixing the first nucleic acid target of the second sample; (d) mixing the first nucleic acid sample and the second (c) sample; (d) mixing the first nucleic acid sample and the second (c) target nucleic acid sample mixture; (f) processing the sample mixture; (e) adding a tleast a first target specific primer to the comparising concentration of at least a first target specific primer to the comparising the sample mixture; (e) acids complementary to the first nucleic acid target is present in the first sample, and a limited concentration of second sample, and a limited concentration of second sample, and a limited concentration of second sample, if the first nucleic acid target is present (c) sample mixture; (e) adding a complementary to the first nucleic acid target of the first sample, if the first nucleic acid target is present (c) second sample, and a limited concentration of second product (c) in the first sample, and a limited concentration of second product (c) acids comprise the first nucleic acid target to the sample the first nucleic acid target of the first nucleic acid target of the first nucleic acid target to the first nucleic acid target to the first nucleic acid target to the first nucleic acid target of the first nucleic acid target of the first nucleic acid target in the second sample, if any, to the amount of the first nucleic acid target in the sample, if any, to the method is useful for comparing one or more sample; (c) amounts of m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Comparing one or more nucleic acid targets within two or more samples useful for the competitive analysis of nucleic acid samples regardless their abundance, by competitive population (containing the target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            molecules that can be used to compare the abundance of each of the targets in the original samples. The method comprises: (a) obtaining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                within two or more samples comprising converting two or more complex nucleic acid samples into a single collection of normalised target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to comparing one or more nucleic acid targets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 63; 106pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                molecules) normalization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-619268/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brown D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-JAN-2001; 2001US-0265695P
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                                               make a
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                                                 invention
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CC within two or more samples comparising converting two or more complex (CC micleic acid samples into a single collection of normalised target (CC molecules that can be used to compare the abundance of each of the CC least a first uncleic acid target; (b) preparing at least a first uncleic acid target; (b) preparing at least a first target (cc comprising a first differentiation domain to the first nucleic acid target; (b) preparing at least a second target is present (CC target of the first sample); (c) preparing at least a second target is present (CC target of the first nucleic acid target is present (CC target of the first nucleic acid target is present (CC target of the first nucleic acid target of the cc second sample); (c) mixing the first nucleic acid target of the cc second sample; (d) mixing the first targed nucleic acid target of the carget of the first sample mixture; (e) adding a limiting concentration of at least a first target specific primer to the carget of the first sample to create a sample mixture; (e) adding a target of the first sample; (f) processing the sample mixture by a process comprising carried target of the first nucleic acids comprision of at least a first target specific primer to the carget of the first sample, if the first nucleic acid target is present in the second sample; (f) the first nucleic acid target is present (CC nucleic acids complementary to the first nucleic acid target in the second carget form the first sample, if the first nucleic acid target in the second sample; (f) differentiation of the first nucleic acid target product nucleic acid target the first nucleic acid target in the first nucleic acid target of the second sample, if any, the first nucleic acid target of the second sample, if any, the first nucleic 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Comparing one or more nucleic acid targets within two or more samples useful for the competitive analysis of nucleic acid samples regardless their abundance, by competitive population (containing the target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ss; PCR; primer; primer extension; mouse; differentiation domian; competitive population normalisation; nucleic acid quantitation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Brown D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-JAN-2001; 2001US-0265695P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to comparing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 4; Page 66; 106pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               molecules) normalization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-619268/66
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RESULT 68
ABS63346
ID ABS63
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Best Local S
Matches 21
                                                                                                         Matches
                                                                                                                                                                                                                                                      This invention relates to a novel method for comparing one or more nucleic acid targets within two or more samples. The method comprises preparing a sample mixture by obtaining at least a first sample and a second sample, each potentially with at least a first nucleic acid target and mixing the first nucleic acid sample and the second nucleic acid sample to create a sample mixture. The method of the invention is useful for fractionating nucleic acid samples into target fractions then using nucleic acids amplification to quantitatively assess the nucleic acid target within each fraction. This method as compared to prior art methods facilitates the analysis of more target sequences to determine nucleic acid profiles of limited tissue samples. The present sequence represents a PCR primer used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hybridizing the samp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Comparing one or more nucleic acid targets within two or more sam hybridizing the samples into target fractions then amplification
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nucleic acid
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                                                                                                                                                                                                            Sequence 21
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                                                                                                                                 Local
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                                   672 TCGAACTCTGCTGATAGCCAA 692
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                                                                                                                                                                                                               BP;
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                                                                                             0.7%; Pr
100.0%; Pr
0;
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1e+02;
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RESULT

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Nuclei
KW Nuclei
KW neurop
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Uniden
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                                                                                                                                                                                                                                                                                                                 Query Match
Best Local (
                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to a novel method for comparing one or more nucleic acid targets within two or more samples. The method comprises preparing a sample mixture by obtaining at least a first sample and a second sample, each potentially with at least a first nucleic acid target and mixing the first nucleic acid sample and the second nucleic acid sample to create a sample mixture. The method of the invention is useful for fractionating nucleic acid samples into target fractions then using nucleic acid samplies into target seem the nucleic acid target within each fraction. This method as compared to prior art methods facilitates the analysis of more target sequences to determine nucleic acid profiles of limited tissue samples. The present sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABS63332 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-JAN-2002; 2002WO-US003169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200261145-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleic acid target detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Interleukin-5 PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Comparing one or more nucleic acid targets within two or more samples by hybridizing the samples into target fractions then amplification prior to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-619271/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Winkler MM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JAN-2001; 2001US-0265692P
                                         Nucleic acid level determination; PCR; primer; gene therapy; immunosuppressive; anti-HIV; anti
                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 53;
  Unidentified
                            neuroprotective;
                                                                                   Real time PCR
                                                                                                                 04-DEC-2003
                                                                                                                                                                      ACF04470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AMBI-) AMBION INC
                                                                                                                                                                                                                                                                                                                                                                                       PCR primer used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             primer;
                                                                                                                                                                                                                                                                       672
                                                                                                                                                                                                                                             _
                                                                                                                                                                                                                                                                                                    21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acid target
                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                      standard; DNA;
                                                                                                                                                                                                                                                              TCGAACTCTGCTGATAGCCAA 692
                                                                                                                                                                                                                                             TCGAACTCTGCTGATAGCCAA 21
                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                           BP; 6 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleic acid amplification; ss; interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brown D;
                                                                                                               (first entry)
                                                                                    targeting IL-5
                            cytostatic; antiallergic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         quantification.
                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                           6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                0.7%;
                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                 Score 21;
Pred. No.
                                                                                   PCR primer R153.
                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                   DB 1; Length 21; 
le+02;
                                           ner; probe; DNA quantification;
antiarthritic;
                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                     Indels
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ABZ95277/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method of quantifying in vivo RNA from CC abiological sample. This involves collecting the biological sample in a C tube comprising a compound inhibiting RNA degradation and/or gene in a CC induction, forming a precipitate comprising nucleic acids, separating the CC precipitate from the supernatant, dissolving the precipitate using a CC buffer, forming a suspension, isolating nucleic acids from the supension cC using an automated device, dispersing or distributing a reagent mix for reverse transcription (RT)-PCR using an automated device, dispersing or distributing a reagent mix for constraints using the nucleic acids isolated within the dispersed reagent mix cC using an automated device and determining the in vivo levels of transcripts using the nucleic acid and RT-PCR reagent mix of the previous step in an automated setup. The method is useful for monitoring or cesent, such as eukaryotic or prokaryotic cells, viruses or phages in a biological sample or for producing a medicament for treating immune crelated disease, e.g., autoimmunity, rheumatoid arthritis, multiple sclerosis, cancer, immunodeficiencies such as AIDS, allergy, grafit cc primer/probe used in the exemplification of the invention
RESULT 71
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stordeur P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-JUL-2003.
                                                                            Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antialsthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 42; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Quantifying in vivo RNA from a biological sample for producing a medicament for treating immune related disease by determining in vilevels of transcripts using nucleic acid/reverse transcription-PCR reagent mix in an automated setup.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JAN-2002; 2002EP-00447009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003060119-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 4 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                   Human IL-5 antisense fragment no.1141.
                                                                                                                                                                                                                                                       ABZ95277;
                                                                                                                                                                                                                     17-0CT-2003
                                                                                                                                                                                                                                                                                        ABZ95277 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
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                                                                inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                 641 TGAAAGAGACCTTGGCACTGC 661
                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                              21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2003WO-EP000493
                                                                                                                                                                                                                     (first
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                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.7%;
                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 21;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                              μ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 21;
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Gaps

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WO200285308-A2 Homo sapiens

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RESULT 72
ABD19251/c
ID ABD192
XX ABD192
XX ABD192
XX ABD192
XX BD192
XX Puman
XX Human
XX Human;
KW Fespir
KW Surfac
KW Surfac
KW Surfac
KW Analge
KW Analge
KW Tespir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cc junctions of genes encoding a polypeptide associated with lung and/or cnasal airway dysfunction and a second active agent comprising an extra control and ubiquinone. A composition of the invention cc antiinflammatory, antiallergic, antiasthmatic, hypotensive, thas antiinflammatory, antiallergic, antiasthmatic, hypotensive, composition and the properties of the composition is useful for treating or use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also containflammatory steroid in a subject, for reducing or depleting levels of an antiinflammatory steroid in a subject, for reducing or depleting levels of or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine continuity surfactant in a subject, stissue, or treating bronchocomstriction, consisted inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO cat figure is a subject, sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 21
                                       beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ds.
                                                                                                                    Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
                                                                                                                                                                                                                                    Human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel pharmaceutical composition, which he first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking region; and 3' intron-exon junctions, or regions within 2-10 nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                               ABD19251 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID
                                                                                                                                                                                                                                                                              29-JUL-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              522 GCCAAAGGCAAACGCAGAACG 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                  DNA fragment 1141.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Li Y, Sandrasagra A,
Tang L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 0 A;
                                                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.7%;
                                                                                                                                                                                                                                                                                                                                                               ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŝ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pabalan J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aguilar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    which has
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Homo sapiens

AAT50761/c
ID AAT507
XX
AC AAT507
XX
DT 24-SEP
XX

standard;

cDNA;

20 BP

0;

24-SEP-1997 AAT50761; AAT50761

(first entry)

RESULT 73

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ce expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.

C The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiaflammatory, antiasthmatic, and beta-adrenergic agonist. The composition is useful for preventing or threating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasconstratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary transplantation reppiration, respiration, respiration, reppiration, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system c.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
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                                                               Query Match
Best Local S
Matches 21
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Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        bronchoconstriction, respiratory tract inflammation, allergies a reducing adenosine sensitivity, levels of adenosine (A) or (A) a surfactant depletion or hyposecretion, when administered to a me oligonucleotides are derived from a gene encoding or regulating
                                                                                                                                 Sequence 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes a novel composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 15; SEQ ID NO 10519; 763pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-093058/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-APR-2001; 2001US-0286036P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           comprising oligonucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acids associated with lung airway
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                               522 GCCANAGGCANACGCAGAACG 542
21
                                                                21;
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                                                                              Similarity
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Tang
                                                                                                                                 BP; 0
                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agent.
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L, Shahabuddin
                                                                                                                                 A; 6 C; 6 G; 9 T; 0 U;
                                                         0.7%; 5c.
100.0%; Pr
                                                                                  Score 21; DB 1; Length 21; Pred. No. 1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             effective for alleviating
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                                                                Mismatches
                                                                                1e+02;
                                                                                                                                 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pabalan
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RESULT 74
AAT76226/c
ID AAT762
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AC AAT762
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DT 12-SEP
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DE Human
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                                                                                                                                                                                                                                                                                                                                                                                                                  The sequences given in AAT50760-69 are primers which were used to amplify CC the sequences encoding ovine interleukin-5 (II-5), and interleukin-12 (II-CC -12) 35 kD subunit (partial and full length sequence) and the 40 kD CC subunit. Ovine II-5 or II-12 are used to treat and/or prevent infections CC in livestock (esp. cows and sheep), particularly where the animals are CC stressed, e.g. during transport. II-5 and II-12 can also be used as CC adjuvants in vaccines for veterinary use (partic. weakly immunogenic CC subunit or synthetic peptide vaccines). They may also be used to treat CC cancer, immunosuppression and allergy, to enhance/suppress the CC reproductive system and to promote growth or early maturity. Optionally CC interleukin can be delivered from constructs or delivery cells and CC antibodies are useful in enzyme immunopotentiators, especially II-5 CC promotes growth of early haematopoietic progenitor cells and generation of constructs growth of early haematopoietic progenitor cells and generation of constructs or delivery cells and generation of gamma-interferon by, and proliferation of, T and NK cells and increases the (non-)specific cytolytic lymphocyte response. The genetic constructs can also be used for in vitro production of II-5 or -
                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12; livestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer; immunosuppression; allergy; reproductive system; growth; early maturity; antibody; diagnosis; immunopotentiator; PCR; amplify; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-JUN-1995;
27-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-JAN-1997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 23; 78pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                               AAT76226 standard; DNA; 20
                                                       12-SEP-1997
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                                                                                                                                                                                                                                                          2269 TGCAGTGAGAATGAGGGCCA 2288
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                                                     (first entry)
                                                                                                                                                                                                                                                                                                Conservative
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95AU-00006244.
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                                                                                                                                                                                                                                                                                                             0.6%; Score 20;
100.0%; Pred. No.
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. 1.1e+02;
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Human IL5 antisense oligonucleotide HUMIL5AS7.

WO9913886-A1

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RESULT 75
AAX54022/c
ID AAX54
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                     Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation, allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; colon cancer; breast cancer; lung cancer; pancreatic cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMIISAS7 specific for the human II5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-reactive airways
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A method for treating airway disease in a subject has been produced which involves the topical administration of an essentially adenosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
                                                                                                                                                                                                                                                 Human IL-5 antisense oligonucleotide fragment.
                                          Synthetic.
                                                                                                                                                                                                                                                                                   05-JUL-1999
                                                                                                                                                                                                                                                                                                                                              AAX54022 standard;
                                                                                        hepatocellular carcinoma; kidney cancer; melanoma; hepatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                               ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                         3064 AACAAAAGGACAGAGAGACA 3083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page 31; 71pp;
                                                                                                                                                                                                                                                                                                                                                                                                                             AACAAAAGGACAGAGAGACA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 0 A; 5 C; 3 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96WO-US009306
                                                                                                                                                                                                                                                                                                                                              DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
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                                                                                             metastasis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              adenosine
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AAA33466/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 20
                                                                                                                                Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; infilammation; allerg; allerg; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary yasoconstriction; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                 AAA33466 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-1997;
09-JUN-1998;
              WO200009525-A2
                                                                                               respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                               28-JUL-2000
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                                               Homo sapiens.
                                                                                                                                                                                                                                            Low adenosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides used in treatment of, e.g.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                  leukaemia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page
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                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                           antisense oligonucleotide SEQ ID NO:1155
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98US-00093972.
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                                                                                lymphoma; carcinoma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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Pred. No.
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. 1.1e+02;
                                                                                metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
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The present invention describes a new composition comprising an antisense CC oligonuclectide (ON) with low adenosine (up to 15%), which targets cull carids involved in bronchoconstriction, allergies, and/or cC inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are cuseful for the treatment of diseases associated with inflammation, cC impaired airways, including lung disease and diseases whose secondary ce.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distease syndrome, pain, cystic cibrosis, pulmonary hypertension, emphysema, chronic obstructive carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the CONs reduces side effects. The A-containing ONs break down with the crelations and inflammation. AAA32313 to AAA35312 represent the uncleotide sequences given in the sequence listing from the present the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 cquences given in the disclosure of the present invention do not match corresponding SEQ ID NO:1 to 185, but the sequences differ crom the previously named sequences. SEQ ID NO:1 to 1860 (AAA32333 to AAA32331 to AAA32333 to AAA32331 to AAA32333 to AAA33232 are specifically claimed ONs from the present invention do not match compating the present invention of the present invention of the sequences given in the disclosure of the present invention do not match compating the content of the present invention do not match compating the present invention of the sequence differ content of the present invention of the sequence side of the present invention of the sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonuclectides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nyce
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 409; 1343pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0095212P
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Ś 밁 Matches Best Local Query Match 3064 AACAAAAGGACAGAGAGACA 3083 20; 20 Similarity AACAAAAGGACAGAGAGACA 1 Conservative 0.6%; 0 Score 20; Pred. No. Mismatches DB 1; 1.1e+02; 0 Length 20; Indels 0, Gaps 0

Sequence 20 BP; 0

A; 5 C; 3 G; 12 T; 0 U; 0 Other;

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RESULT 77
AAC73702;
               AAC73702 standard;
                DNA;
                20
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IL-5 antisense oligonucleotide ISIS #16087

02-FEB-2001

(first entry)

AAC73702/c
ID AAC737
XX
AC AAC737
XX
O2-FEB
XX
Human
XX
Human;
KW Human;
KW Human;
KW IL-S
KW IL-S
KW II-S
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection; Human; interleukin-5; IL-5; signal transduction; inflammation; 88

Homo sapiens Synthetic.

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RESULT 78
AAC73705/c
ID AAC73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Sim
Matches 20;
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AAC73705 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         prevent or delay infection, inflammation or tumour formation
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                                                                                                                                                            WO200058512-A1
                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                             Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosupp. IL-5 receptor-alpha; asthma; eosinophilic syndrome;
                                                                                                                                                                                                                                                                            Human IL-5 antisense oligonucleotide ISIS #16090
                     WPI; 2000-594648/56
                                                                                         26-MAR-1999;
                                                                                                               17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                              Homo sapiens.
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                                                                  SISI
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                                           Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                   PHARM INC
                                                                                                                                                                                                                                                                                                     (first
                                                                                        99US-00280799
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63; 156pp; English
                                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.6%;
                                           Mckay
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Pred. No.
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1.1e+02;
                                                                                                                                                                                                                                immunosuppressive; cytostatic;
syndrome; infection;
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Antisense oligonucleotide compound used to treat asthma and eosinophilic

Query Match

Score

20;

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Length

20;

Sequence

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RESULT 79
AAC73708/c
ID AAC737
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                       The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; interleukin-5; IL-5; signal transduction;
antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human IL-5 antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC73708 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 20; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                syndrome in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAC73708;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             prevent or delay infection, inflammation or tumour formation
                            prevent or
                                                                                                                                                                Example
                                                                                                                                                                                             Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                            WPI; 2000-594648/56.
                                                                                                                                                                                                                                                                          Dean
                                                                                                                                                                                                                                                                                                                                     26-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                WO200058512-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                       (ISIS-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              domo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2135 AAGACGGAGAGTAAACCAAT 2154
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                                                                                                                                                                20; Page 64;
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20 BP; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGACGGAGAGTAAACCAAT 1
                                                                                                                                                                                                                                                                         Karras JG,
                            delay infection,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer; ss.
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A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oligonucleotide ISIS #16093
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                              inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 20;
Pred. No.
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RESULT 80
AAC73686/c
ID AAC736
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Best Local S
Matches 20
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                                                                                                                                                                                                                  The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-594648/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno IL-5 receptor-alpha; asthma; eosinophilic syndro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAC73686 standard; DNA; 20
            02-FEB-2001
                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                         Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-MAR-2000; 2000WO-US007318
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                                                     AAC73714
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                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inflammation;
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                                                                                                                                                     Similarity
20; Conserv
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                                                      standard;
                                                                                                                          ATGCACTTTCTTTGCCAAAG 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCAGTGAGAATGAGGGCCA 2288
                                                                                                                                                                                                                                                                                                                                                                                                Karras
                                                                                                                                                                                              B₽;
                                                                                                                                                                                                                                                                                                                     Page 63; 156pp; English.
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                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
            (first entry)
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                                                      DNA;
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C;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oligonucleotide
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                                                                                                                                                               Score 20;
Pred. No.
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                                                                                                                                                                                               5 T;
                                                                                                                                                     red. No. 1.1
Mismatches
                                                                                                                                                                                               ou;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SISI
                                                                                                                                                     1.1e+02;
hes 0;
                                                                                                                                                                           DB 1;
                                                                                                                                                                                               0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #16071
                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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RESULT 82 AAC73691/c ID AAC73691 standard;

DNA;

20 BP

02-FEB-2001

(first entry)

AAC73691;

Human IL-5

antisense

oligonucleotide ISIS #16076.

유

895 TCCTCTCCAGACTCTGAGGA 914

0

20

TCCTCTCCAGACTCTGAGGA 1

inflammation;

cancer; ss.

17-MAR-2000; 2000WO-US007318

05-OCT-2000.

WO200058512-A1

Synthetic.

Homo sapiens

Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;

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Matches
               Best
                            Query Match
                                                                                    The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                        Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                          Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                           Example 20; Page 64; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                       WPI; 2000-594648/56.
                                                                                                                                                                                                                                                                                                                                      Dean NM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human IL-5
                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
               Local
 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 interleukin-5; IL-5; signal transduction;
               Similarity
                                                                                                                                                                                                                                                                                                                                      Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense oligonucleotide ISIS
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                  99US-00280799.
               0.6%;
 0
               Score 20;
Pred. No.
Mismatches
                              DB 1;
               1.1e+02;
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                              Length 20;
 Indels
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 Gaps
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RESULT 83
AAC73697/c
ID AAC73
XX
AC AAC73
XX
AC AAC73
DT 02-FI
XX
Huma
XX
Huma
KW Huma
KW III-!
KW III-!
XX
Hom
OS Syn
XX
PN WO2
XX
PN WO2
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PD 05-
XX
PF 17
XX
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CCC
CCC
CCC
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Matches 20
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AAC73697
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20
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                                                                                                                                                                                                                                             26-MAR-1999;
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                                                                                                                                                                                                                                                                                                             05-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human IL-5 antisense oligonucleotide ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 20; Page 63; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                         inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; II-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
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                                                                                                                                                  2000-594648/56
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                                                                   20;
                                                                                              oligonucleotide compound used to treat asthma and eosinophilic in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
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                                                                                                                                                                               Karras JG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.6%;
ilarity 100.0%;
Conservative
                                                               Page 63; 156pp; English.
                                                                                                                                                                                                                PHARM
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                                                                                                                                                                                                                                               99US-00280799
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                                                                                                                                                                               Mckay
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Pred. No.
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The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.

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20

ATGCACTTTCTTTGCCAAAG

kin-5 (IL-5) signal
target nucleic acid

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Query Match
Best Local S
Matches 20
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                                                                                      The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and estinophilic syndrome. The oligonucleotides are also useful for research uses and to
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                                                                             prevent or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
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                                                    20 BP; 7
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                                                                          delay infection, inflammation or tumour formation
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  Conservative
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RESULT 86
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                           Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno IL-5 receptor-alpha; asthma; eosinophilic syndro
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                                                                                   Human IL-5
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               cancer; ss.
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                                                                                                                                                                   DNA;
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                                                                                oligonucleotide ISIS #16103
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                           immunosuppressive; cytostatic;
syndrome; infection;
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RESULT
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                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                   Example 20; Page 64; 156pp; English
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87
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                                                        2108 TTTTTCACAGAAAAAGTGTG 2127
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                                         TTTTTCACAGAAAAAGTGTG
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Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno Synthetic. Human IL-5 02-FEB-2001 AAC73699; AAC73699 standard; 26-MAR-1999; 05-OCT-2000 Homo sapiens inflammation; IL-5 receptor-alpha; asthma; eosinophilic (ISIS-) 17-MAR-2000; WO200058512-A1 SISI antisense PHARM INC 2000WO-US007318 (first entry) cancer; 88. 99US-00280799 DNA; oligonucleotide ISIS #16084. 20 ВP immunosuppressive; cytostatic; syndrome; infection;

WPI; 2000-594648/56

XX,

Karras JG,

The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to

or

delay infection, inflammation or tumour

formation

Claim 4;

Page 63; 156pp; English.

Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.

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                           The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
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                                                                                                                                       Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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                                                                                                                                                                                                                                                                                                                                                                                             Human; interleukin-5; IL-5; signal transduction;
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IL-5 receptor-alpha; asthma; eosinophilic
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ilarity 100.0%;
Conservative
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                   infection,
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syndrome; infection;
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Other;

RESULT 90
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Query Match
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Matches 20
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AAC73712/c
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                                                                                               of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
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                                                                            Sequence 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammation;
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                                    Similarity
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                                                                            BP; 0
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                         Conservative
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1.1e+02;
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AAC73690/c
ID AAC736
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Human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                      Human; interleukin-5; IL-5; signal transduction;
antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                            Human IL-5 antisense oligonucleotide ISIS #16075
                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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IL-5 receptor-alpha; asthma; eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-FEB-2001
                05-OCT-2000
                                           WO200058512-A1.
                                                                      Synthetic.
                                                                                    Homo sapiens
                                                                                                                          IL-5 receptor-alpha; asthma; eosinophilic
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                                                                                                            inflammation;
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syndrome; infection;
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syndrome; infection;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                              Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       prevent or delay infection, inflammation or tumour
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                                                                                                                                                                                                      05-OCT-2000
                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                         Human; interleukin-5; IL-5; signal transduction;
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Pred. No.
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The present sequence

is an oligonucleotide used

for antisense

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Example 20;

Page 63; 156pp;

English

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Best Local
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                                                                                                The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
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                                                                                                                                                                                                                                              Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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TGATGGCATGAATAAGTAAA 983
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Pred. No
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PARESULT 94
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Best Local S
Matches 20
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antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
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                                               Human; interleukin-5; IL-5; signal transduction;
                                                                                                Human IL-5 antisense oligonucleotide ISIS #16072.
                                                                                                                                                  02-FEB-2001
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AAC73687 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94
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                                                                                                                                                                                                                                                                                                                                                                                                             2051 GCTGTGCCTATTTCTATGGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20; Page 63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGATGGCATGAATAAGTAAA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense oligonuçleotide ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                  entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                             2070
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U;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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antisense oligonucleotide; antiasthmatic;

receptor-alpha; asthma;

eosinophilic

immunosuppressive;
syndrome; infectior

infection;

cytostatic;

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AAC73700/
ID AAC7
XX
AC AAC7
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AC AAC7
XX
Huma
XX
Huma
XX
Huma
XX
Homc
OS Homc
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XX
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PN W02(
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PN 26-1
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PR 26-1
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                      3700/c
AAC73700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and ecsinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
  Dean NM,
                                             26-MAR-1999;
                                                                   17-MAR-2000; 2000WO-US007318.
                                                                                             05-OCT-2000.
                                                                                                                  WO200058512-A1
                                                                                                                                                   Homo sapiens
                                                                                                                                                                         inflammation;
                                                                                                                                                                                                 antisense oligonucleotide;
                                                                                                                                                                                                              Human;
                                                                                                                                                                                                                                  Human IL-5 antisense oligonucleotide ISIS #16085.
                                                                                                                                                                                                                                                          02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is an oligonucleotide used for antisense modulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-594648/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation;
                                                                                                                                                                                                                                                                                                                               96
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                                                                                                                                                                                    receptor-alpha; asthma; eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                      523
                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                            interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or delay
                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ISIS PHARM INC.
                      ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
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                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                                                      CCAAAGGCAAACGCAGAACG
                                                                                                                                                                                                                                                                                                                                                                 CCAAAGGCAAACGCAGAACG
 Karras JG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                          cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9908-00280799
                                               99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             infection, inflammation or tumour formation
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                                                                                                                                                                                                                                                                                                        DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 C; 6 G; 9 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   156pp; English
 Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mckay
                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                            0;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                 μ
                                                                                                                                                                                                                                                                                                                                                                                     542
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                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                       1.1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 Other;
                                                                                                                                                                                     syndrome;
                                                                                                                                                                                                immunosuppressive; cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                      infection;
                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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26-MAR-1999; 17-MAR-2000;

99US-00280799.

(ISIS-)

ISIS PHARM INC

05-OCT-2000.

2000WO-US007318

WO200058512-A1.

Synthetic.

Homo

sapiens

inflammation; cancer; 88. IL-5 receptor-alpha; asthma;

eosinophilic

immunosuppressive; c
syndrome; infection;

cytostatic;

Dean

3

Karras JG,

Example

20;

Page 63;

156pp;

English

Antisense oligonucleotide WPI; 2000-594648/56

ä

humans modulates

compound used to treat asthma and eos

eosinophilic

The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation

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S
                                                                                                                                                SXCCCCCCCX SXTTXXX
밁
                                                                        Matches
                                                                                                         Query Match
                                                                                                                                                                            The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                        Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 63; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-594648/56
                                                                                          Local
                                  1932 GTCAAACTGTGCAAGGGGGT 1951
20
                                                                        20;
                                                                                            Similarity
GTCAAACTGTGCAAGGGGGT
                                                                        Conservative
                                                                                            100.0%;
                                                                                                           0.6%;
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                                                                                          Score 20;
Pred. No.
                                                                        Mismatches
                                                                                                           DB 1;
                                                                                          1.1e+02;
                                                                                                           Length 20;
                                                                       Indels
                                                                        0,
                                                                        Gaps
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RESULT 97
AAC73701/c
Human; interleukin-5; IL-5; signal transduction;
antisense oligonucleotide; antiasthmatic; immuno
                                                    Human
                                                                                  02-FEB-2001
                                                                                                                      AAC73701;
                                                                                                                                                       AAC73701 standard; DNA;
                                                    IL-5
                                                                                  (first entry)
                                                  oligonucleotide ISIS #16086
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ARESULT 98
AAC73696/G
ID 7AC73696/G
ID 7AC73
XX AAC73
XX AAC73
XX DT 02-FE
XX Human
XX Human
XX Human
XX Homo
OS Homo
OS Synth
XX Synth
XX 17-MA
PR 26-MA
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XX Dean
XX WPI;
XX WPI;
XX Antis
PT Syndr
XX The I
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CC Syndr
RESULT 99
AAC73716/c
ID AAC737
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Matches 20;
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AAC73696
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                                                                                                                                                                                                                                             The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                           Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                 Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human IL-5 antisense oligonucleotide ISIS #16081.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inflammation;
                                                                                                               1407 TGCCTGGTCATATTAAAATG 1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1988 AAGAAATACATTGACGGCCA 2007
                                                                                                                                                                                                                                                                                                                                                                                                                                        2000-594648/56
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                                                                                      20
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                                                                                                                                                           Similarity
                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                               20; Page 63; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Karras JG,
                                                                                                                                                                                                                                 delay
                                                                                                                                                                                                    BP; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00280799
                                                                                                                                                                                                                                 infection, inflammation or tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; 4 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                    A; 4 C; 3 G; 6 T; 0 U; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                        0.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
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                                                                                                                                                          Score 20;
Pred. No.
                                                                                                                                             Mismatches
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1.1e+02;
                                                                                                                                                                          DB 1;
                                                                                                                                                          1.1e+02;
                                                                                                                                                                                                     Other;
                                                                                                                                                                       Length 20;
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                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                    formation
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                                                                                                                                            Gaps
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AAC73716 standard;

DNA;

20

ΒP

Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno; IL-5 receptor-alpha; asthma; eosinophilic syndroi

immunosuppressive; cytostatic; syndrome; infection;

Human IL-5

antisense oligonucleotide ISIS #16083

0

Synthetic

Homo sapiens

inflammation;

cancer; ss.

WO200058512-A1

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AAC73698/c
ID AAC736
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                                                                                                                                                                                                              RESULT 100
                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection; inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno IL-5 receptor-alpha; asthma; eosinophilic syndro
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                                               Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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Score 20; DB 1; L Pred. No. 1.1e+02;

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                        The present sequence is an oligonuclectide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonuclectides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonuclectides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonuclectides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
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syndrome in humans modulates
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ARCSULT 103
AAC73689/C
ID AAC736
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XX ACC736
XX ACC736
XX CO-PEB
XX Human;
XW Antise
XW IL-5;
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RESULT 104
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection; inflammation; cancer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-OCT-2000
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                                                     Human IL-5 antisense oligonucleotide ISIS #16092
                                                                                                                                                                                                                                AAC73707 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 20; Page 63; 156pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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RESULT 105
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                                                                                                                                                                                       Sequence 20 BP; 4 A; 8 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                             Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
inflammation; cancer; ss.
AAC73709 standard;
                                                                                                                                                                                                                    prevent or delay infection, inflammation or tumour formation
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                                                                                        2241 AAGATTTTGGAGGAGAAGGA 2260
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                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                    20; Page 64; 156pp; English.
                                                                        AAGATTTTGGAGGAGAAGGA 1
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                                                                                                                                 Conservative
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DNA;
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AAC73709;

02-FEB-2001 (first entry)

Human IL-5 antisense oligonucleotide ISIS #16094.

Human; interleukin-5; IL-5; signal transduction;

IL-5 receptor-alpha; asthma; eosinophilic syndrome; inflammation; cancer; ss. antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; infection;

Synthetic. Homo sapiens.

WO200058512-A1

17-MAR-2000; 2000WO-US007318

26-MAR-1999; 99US-00280799

(ISIS-) ISIS PHARM INC

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AAC73706/

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                    The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno IL-5 receptor-alpha; asthma; eosinophilic syndro
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                                                                                                                                                                           Example
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  expression.
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3. 1.1e+02;
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syndrome; infection;
                                                                                                                                                                                                                        treat asthma and eosinophilic signal transduction.
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RESULT 107
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Best Local
                                                                                                           of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             syndrome. The oligonucleotides are also useful for prevent or delay infection, inflammation or tumour
                                                                                       Sequence
                                                                                                                                                                                                                                     Antisense oligonucleotide compound used to treat asthma and eos syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                      05-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAC73695;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAC73695 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20
                                                                                                                                                                                           The present sequence is an oligonucleotide used for antisense
                                                                                                                                                                                                                 Example
                                                                                                                                                                                                                                                                                               Dean
                                                                                                                                                                                                                                                                                                                                          26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                               17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                    (-SISI)
                                                                                                                                                                                                                                                                                                                                                                                                           WO200058512-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inflammation;
                     1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2186 AATGAACACCGAGTGGATAA 2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       receptor-alpha; asthma; eosinophilic
                                                                                                                                                                                                                                                                                               3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IL-5
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                           20;
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                                                                                                                                                                                                                                                                                                                    SISI
                                                       Similarity
                                                                                                                                                                                                                 20;
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                      TTCCCAAAGAGCATCGTGTC 1180
                                                                                        20
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                                                                                                                                                                                                                                                                                              Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense
                                                                                       B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 3
                                                                                                                                                                                                               Page 63; 156pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                           Conservative
                                                                                                                                                                                                                                                                                                                     PHARM INC
                                                                                                                                                                                                                                                                                                                                                                 2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cancer; ss.
                                                                                                                                                                                                                                                                                                                                          99US-00280799
                                                                                        ഗ
                                                                                       A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; 5 C; 3 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
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                                                       100.0%;
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                                                      Score 20;
Pred. No.
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Pred. No.
                                           Mismatches
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                                                                DB 1;
                                                       1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #16080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunosuppressive; cytostatic;
syndrome; infection;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                Length 20;
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                                            Indels
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                                           0
                                                                                                                                                                                                                                                 eosinophilic
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                                                                                                                                                                                           modulation
                                           Gaps
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RESULT 108 AAC73688/c

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                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and cosinophilic syndrome. The oligonucleotides are also useful for research uses and to
         Homo sapiens.
Synthetic.
                                            Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno: IL-5 receptor-alpha; asthma; eosinophilic syndroinflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense oligonucleotide; antiasthmatic; immunosuppressive; carries receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human IL-5 antisense oligonucleotide ISIS #16073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAC73688 standard;
                                                                                                           Human IL-5
                                                                                                                                  02-FEB-2001
                                                                                                                                                                                   AAC73704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; .2000-594648/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                            Local
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20; Conserv
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                                                                                                                                                                                   standard;
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                                                                                                                                                                                                                                               ACGTTTCAGAGCCATGAGGA 1
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                                                                                                        antisense oligonucleotide ISIS #16089.
                                                                                                                                                                                                                                                                                                                                                                         delay
                                                                                                                                                                                                                                                                                               Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 63; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                       infection, inflammation or tumour
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                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                6 C; 4 G; 6 T; 0 U; 0 Other;
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Pred. No.
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                                                                                                                                                                                                                                                                                               1.1e+02;
hes 0;
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                                                        immunosuppressive;
syndrome; infection
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                                                                     cytostatic;
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Best Local S
Matches 20
                                                                                                                                                                                                                                   Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; allergic rhinitis; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; pulmonary hypertension; emphysema; pulmonary transplantation rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of interleukin-5 (IL-5) signal transduction. Oligonuclectides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonuclectides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonuclectides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                          Human ILS polynucleotide fragment #1155.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF19588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prevent or delay infection, inflammation or tumour formation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-MAR-2000; 2000WO-US007318
                                                          06-APR-1999;
                                                                                                                     26-OCT-2000
                                                                                                                                                 WO200062736-A2
                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                          chronic
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                                                                                      24-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2108
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                                                                                                                                                                                                                          obstructive
                                                                                                                                                                                                            88.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20; Page 63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTTTCACAGAAAAAGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTTTCACAGAAAAAGTGTG
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ilarity 100.0%;
Conservative
                                                                                        2000WO-US008020
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                                                          99US-0127958P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                                                                                        pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         156pp; English
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Pred. No. 1.1e+
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                                                                                                                                                                                                                             disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                          pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.1e+02;
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RESULT 111
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nyce
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
26-MAR-1999;
                                        07-MAR-2001; 2001US-00800629.
                                                                                  12-SEP-2002
                                                                                                                            US2002128216-A1
                                                                                                                                                                                                            immunosuppressant;
                                                                                                                                                                                                                                Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                             Human Interleukin 5 antisense oligonucleotide ISIS 16079.
                                                                                                                                                                                                                                                                                                                       13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                          ABX04348 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 14; Page 208; 1592pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3064 AACAAAAGGACAGAGAGACA 3083
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20; Conserv
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                                                                                                                                                                                                               eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
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0; Mismatches
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                                                                                                                                                                                                               syndrome;
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hes 0;
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RESULT 112
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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(KARR/)
(MCKA/)
                                                                                                           07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                       Human Interleukin 5 antisense oligonucleotide ISIS 16084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 5 C; 1 G; 9 T; 0 U; 0 Other;
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                                                            26-MAR-1999;
17-MAR-2000;
                                                                                                                                            12-SEP-2002.
                                                                                                                                                                            US2002128216-A1
                                                                                                                                                                                                                                                       Human; se;
                                                                                                                                                                                                                                                                                                                         13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                      ABX04353 standard; DNA; 20
                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                      immunosuppressant;
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KARRAS J G.
MCKAY R.
MANOHARAN M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGATGGCATGAATAAGTAAA 1
                                                                                                                                                                                                                                        antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
ressant; eosinophilic syndrome; asthma.
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                                                             2000WO-US007318
                                                                                                                                                                                                                                                                                                                       (first entry)
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Gaps

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(DEAN/) DEAN N M. (KARR/) KARRAS J G. (MCKA/) MCKAY R.

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4.54.4

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length, which modulates interleukin (IL)-5 signal transcurrent.

C include are a pharmaceutical composition comprising the antisense coligonucleotide and a pharmaceutically acceptable carrier or diluent, and adiagnostic kit for detecting the expression level of the membrane form crass soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of comparts of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian C IL-5 receptor a in mammalian cells or tissues, treating a mammalian C IL-5 receptor a in mammalian cells or tissues, treating a mammalian C IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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ABX04372/c
THE PROPERTY OF THE PROPERTY O
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WPI; 2003-039602/03
                                                 Dean NM,
                                                                                                                                                                (DEAN/)
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17-MAR-2000; 2000WO-US007318.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
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KARRAS J G.
MCKAY R.
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                                                 Karras JG,
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versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 receptor a, in cells or tissues, for altering the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
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밁 Ś Query Match Best Local S Matches 20 2108 20 TTTTTCACAGAAAAAGTGTG 1 20; Similarity TTTTTCACAGAAAAAGTGTG 2127 Conservative 0.6%; 0; Score 20; Pred. No. Mismatches DB 1; 1 1.1e+02 0 Length 0 Gaps

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Sequence 20

BP; 7

A; 4 C; 2 G; 7 T; 0 U; 0 Other;

is an antisense oligonucleotide targetting human IL5

RESULT 114 ABX04344/c ABX04344 standard; DNA; Human Interleukin 5 antisense oligonucleotide ISIS 16075 13-JAN-2003 ABX04344; (first entry) 20 ₽₽

immunosuppressant; 88; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; eosinophilic syndrome; asthma.

Homo sapiens

US2002128216-A1

12-SEP-2002.

07-MAR-2001; 2001US-00800629

17-MAR-2000; 26-MAR-1999; 2000WO-US007318 9905-00280799

(DEAN/) DEAN N M. (KARR/) KARRAS J G. (MCKA/) MCKAY R. (MANO/) MANOHARAN M.

Dean NM, Karras JG, Mckay ,W Manoharan **.**

2003-039602/03

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal

Example

20;

Page

19;

77pp;

English

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RESULT 115
ABX04342/c
ID ABX043
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Best Local S
Matches 20
                                                                                                                                                                   Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                               (KARR/)
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KARRAS J G.

MCKAY R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antisense; interleukin 5; IL-5; IL-5 receptor;
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1.1e+02;
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The invention length, which

relates to modulates :

interleukin an

antisense compound of erleukin (IL)-5 signal

8-30 nucleobases in transduction. Also

The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, a diagnostic kit for detecting the expression level of the membrane f versus soluble form of IL-5 receptor a. The antisense compound is use for modulating IL-5 signal transduction, modulating expression of

diluent, and membrane form and is useful

'n

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal

Example 20; Page 19;

77pp; English.

WPI;

2003-039602/03

Example 20; Page 19; 77pp; English.

length,

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RESULT 116
ABX04358/c
ID ABX043
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Best Local &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                           07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human Interleukin 5 antisense oligonucleotide ISIS 16089
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KARRAS J G.

MCKAY R.
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